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right of chemists to prescribe was tried last month
Mr. Justice Field and a common jury, in the Court of
Bench, and resulted in a defeat of the chemists. The
ant, a chemist in Bermondsey, had treated very serious
s, and it does appear to be a subject for regret that the
Association should have chosen such an unfavourable
s this one whereby to test the right of chemists to
er-practice." Very important evidence of the custom
trade previous to 1815 was put on record, but it was
tly insufficient to meet the charges under inquiry, and
ardly be a matter for surprise that the verdict went in
of the apothecaries. It is to be hoped that this mistake
t prejudice the trade in its future attempts to maintain
oubtedly rightful privileges.

Executive Committee of the Trade Association has met at
ingham since the trial of the action—Apothecaries Society
gins,—and having received the opinion of their solicitor
t would be useless to appeal, have resolved to take no
r steps in that case, but to defend with energy the action
g between the Apothecaries' Society and Shopperloy in
ourt of Exchequer. The Association is endeavouring to
a special defence fund of 2,000l. for purposes of protection.
plication to the Pharmaceutical Council for aid in this
r has been submitted.

We give the comments of the several medical journals on the
counter-prescribing case. The *British Medical Journal* urges
the British Medical Association to establish local committees
throughout the country for prosecutive purposes. The *Lancet*
and other journals seem to recognise the necessity of counter-
prescribing to some slight extent.

We are able to publish a few portraits of the venerable wit-
nesses who, at the recent trial, came to give evidence of the
practice of chemists and druggists before 1815. The four
gentlemen whose portraits we publish are Mr. George Goddon,
of Plumstead (82), Mr. Francis Cupiss, of Diss (80), Mr. E.
Markland, of Manningtree (79), and Mr. J. H. Glaisyer, of
Brighton (76). The others present at the trial were Mr. Thomas
Parsons, of Swithland, Leicestershire (84), and Mr. John Finch,
of Cheltenham (77).

The Pharmaceutical Council have prosecuted a Limited
Liability Company in the Tottenham Court Road for selling
poisons, and the judge of the Bloomsbury County Court has
decided against the Society. We observe with much satisfac-
tion that the Council has resolved to appeal. Thus the question
whether a company may sell poisons by adopting the simple de-
vice of employing a registered chemist as an assistant will at
last come before a competent court for decision. If this can be
done legally, the Pharmacy Act is a dead letter.

The charge against a drysilter of Kingsland, of selling as
violet powder a mixture containing about 50 per cent. of arsenic,
has naturally caused much public sensation. The prisoner has
been committed for trial on a charge of manslaughter. Twelve
or thirteen infants are supposed to have been killed by using
the powder. We have taken a good deal of trouble to make
inquiries in this matter, and cannot find that any chemist has sold
any of this arsenicated violet powder. A "Chemical Lecturer,"
however, makes a vague charge in the *Lancet* that he has found
4 per cent. of arsenic in some violet powder he had purchased
from a chemist. Several large firms advertise in our pages a
guarantee of the purity of their manufactures.

It is stated that the Government has consented to alter the
new Weights and Measures Bill, so as to render the use of
apothecaries weight permissible to chemists. The Dental
Practitioners Bill, as amended by its authors, now offers the
right of registration to those who have been *bonâ fide* engaged
in the practice of dentistry in conjunction with the practice of
pharmacy. The new Medical Bill has passed the House of
Lords, and certain alterations which have been made in it
will have the effect of retaining whatever power the Apothe-
caries Act may give against "counter practice" by chemists and
druggists. In view of the observations made by Mr. Justice
Field at the recent trial in the Court of Queen's Bench, it would
seem to be extremely desirable that an effort should now be
made to get the fair and legitimate rights of chemists and
druggists recognised by the legislature. His lordship dis-
tinctly urged that something of the kind should be done in view
of public convenience.

The Pharmaceutical Council had before them at their last
meeting an application from ourselves for the admission of a
reporter to the monthly meetings. The consideration of this
application was postponed. It happens, though we do not wish
to imply that this caused the postponement, that of the
4 members of Council absent 3 might be expected to vote
against and only 1 for our application.

At the last meeting of the Pharmaceutical Society of Ireland
a vote of thanks to the late president was passed, and it was
ordered to be engrossed. At the next meeting Mr. Holmes will
move that the time has arrived for the Society to protect its
licentiates from infringements of their right.

The death of the famous Dr. Jephson, of Leamington, at an advanced age, is announced. Thirty years ago he was perhaps the most popular physician in England, and patients visited him from all parts of Europe. He is said to have made over 20,000*l.* a-year by his practice.

Mr. William Baker, chemical analyst, of Sheffield, has succumbed to the severe injuries which he met with in the accident we alluded to last month.

In the Liverpool County Court on May 21 a case was decided in which James Taylor, not registered, carrying on the chemists' business of his deceased son, with the aid of a registered manager, summoned a doctor for the value of drugs delivered. The doctor defended himself on the ground that the man was not registered, and therefore could not recover.—The judge agreed with this view of the case, and nonsuited the plaintiff.

On the morning of Saturday, June 8, the premises of the Glasgow Apothecaries' Company in Virginia Street, Glasgow, were entirely destroyed by fire. The damage done is estimated at 30,000*l.*, of which 26,000*l.* is covered by insurance. The company has secured other premises within a short distance of those destroyed, and is carrying on business as usual. Serious injury was also done by fire to the chemical works of Messrs. May & Baker, Battersea, a few days ago. Messrs. Morson & Son have also been visited by the "raging element."

Pharmacy at Cricklade does not seem to be in a very gay condition. A business was recently sold there (as will be seen from our report), the daily takings in which never exceeded two pounds, and some days did not amount to one penny sterling. The vendor was prosecuted criminally for misrepresentation, but the magistrates thought the case was rather one for a civil action.

A chemical labourer at Gateshead has applied his scientific acquirements in an ingenious manner, to the discomfiture of some bailiffs "in possession," by preparing a compound with such an offensive odour that it was almost impossible to remain in the house. The joke was however spoiled by the magistrates fining the chemist to double the amount of the debt claimed.

The estates of Frank Wilton & Co. and of Close & Legg are both to be liquidated in bankruptcy. The reports which we have published of these failures indicate an extraordinary degree of looseness in the wholesale drug trade, of which the debtors seem to have taken advantage. The reckless trading which both firms have carried on is evident; but the creditors are themselves greatly to blame for encouraging such transactions.

Our translation of *Formule of Secret Medicines* includes this month an extraordinary collection of "epilepsy cures." Many curiosities of faith will be found among these. One recipe, for instance, is a magpie shot on Twelfth-night and burned to a coal. Another prefers dried and powdered rats. Another prescribes a combination of old medicines to be worn in a linen bag at the pit of the stomach for six months. These remedies are actually on sale in some parts of Europe.

We print abstracts of two important pharmaceutical papers by Dr. C. R. A. Wright and Mr. A. Pearson Luff, recently read at the Chemical Society. In one their researches show that the ordinary veratria of commerce is a compound of three alkaloids; from the other it appears that crystallisable alkaloids of uniform character can be obtained from *Aconitum ferox* and *A. Napellus*, instead of the amorphous salts of variable constitution at present produced.

We fully reported the meetings of the Chemists' Trade Association and of the Pharmaceutical Society in a special issue on May 18. Our foreign subscribers will receive these reports as a supplement to the current issue.

A well-known pharmacien of Athens, M. Xavier Landerer, has sent us half-a-dozen curious items which will be read with interest.

VENERABLE CHEMISTS.

At the trial in the Court of Queen's Bench last month between the Apothecaries' Society and the Chemists' Trade Association, the seat below the bench was occupied by half-a-dozen white-haired old gentlemen, brought up to London by the defendant to speak of the pharmacy of more than sixty years ago. Their evidence was of vital importance to all chemists and druggists present and to come, and if it did not have all the effect it ought to have had at the trial in question, it will none the less stand as one of the most important testimonies on record in the history of pharmacy. The thanks of the trade generally are assuredly due to the gentlemen who thus disinterestedly came forward to help their own profession at a critical period of its history.

The united ages of the six witnesses referred to amounted to 478 years, the oldest was 84 and the youngest 77.

We are sorry that we are not able to furnish portraits of the whole group. Two decline to accede to our request, and are thought to add that one or two of the others submitted with reluctance.

In letters received from these witnesses since the trial, in reply to an inquiry from us, the witnesses express their opinion very distinctly to the effect that Mr. Wiggins had somewhat exceeded the limits permitted by the legislature, though we think it fair to remind these gentlemen of the fact that neither they nor the judge, nor even the counsel for the defendant seem to have sufficiently recognised, that he had treated of minor or other slight ailments, which afterwards turned to bronchitis, pneumonia, scarlet fever, and convulsions. Who can tell what is to be the course of any cold, and does the law allow a chemist to treat it if it is certain that it will go no further, but punish him with a 20*l.* penalty if it develops into anything serious? Such a condition is of course equivalent to an absolute prohibition of anything in the way of counter practice. But return to our witnesses. Taking them in the order of their ages we have first—

Mr. Thomas Parsons (84), Swithland, Loughborough, whose evidence will be found in our report, but who simply will say, "I regret to inform you that I have no portrait by which I can send you."

Mr. George Godden (82), Plumstead, writes "When the Act of 1815 passed, I recollect that the chemists were not to be obstructed in any form from their previous practice over the counter, but they were not to visit. I think the defendant went beyond the bounds of prudence and attended cases which did not come within his province."

Mr. Francis Cupiss (80), Diss, considers "Mr. Wiggins exceeded the privileges reserved to the chemist and druggist by the Act of 1815, and the case would probably never have been defended could the charges have been properly investigated by the Association. This was rendered impossible by the Apothecaries' Company refusing the addresses of the parties till late to withdraw. I have considered myself entitled to deal with simple ailments, but where I suspected acute or dangerous disease I referred the patient to a qualified medical man. Mr. Cupiss further remarks that the verdict cannot be regarded as "affecting the privilege of chemists and druggists, doing as the trade has done from time immemorial, in prescribing behind the counter in simple ailments. The Apothecaries' Company, he is confident, will never be able to supplant this, as the practice is so necessary to the poorer classes. Cupiss adds a recommendation that every chemist who has not yet qualified as a pharmaceutical chemist should at the same time qualify him as an apothecary. Those not so fitted, he urges, should confine themselves to simple cases."

Mr. E. Markland (79), Manningtree, has prescribed exclusively for more than 60 years, but he would not have ui



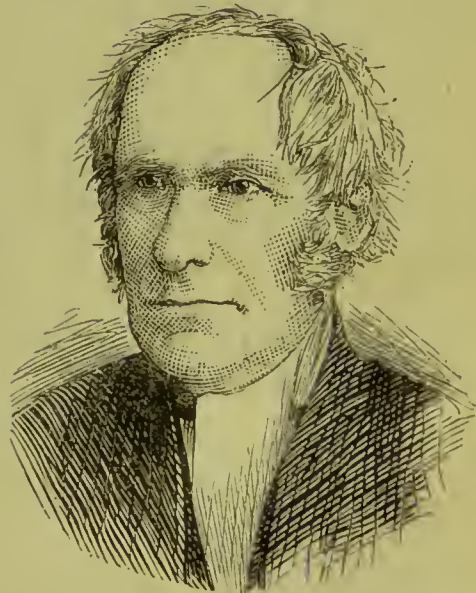
Yours obt. Servt
Geo Goddard



Yours sincerely
Francis Cuyler



Very truly
E. Westlake



Very truly
John Home Glasier

ken the case treated by Mr. Wiggins either before or after 15.

Mr. John Finch (77), Cheltenham, says that chemists were in the habit of prescribing for simple cases such as cutaneous eruptions, &c., previous to 1815. He would not have undertaken such cases as those in which Mr. Wiggins prescribed.

Mr. J. H. Glaisyer (76), Brighton went behind the counter for himself in 1816. The business (Glaisyer & Kemp's) was established by this witness's father in 1798, and Mr. Grover Kemp was taken into partnership in 1813 or 1814. Books are still in the possession of the firm showing that the last named gentleman prescribed considerably over the counter, both before 1815 and since. Mr. Glaisyer, however, thinks he may venture to say that in such cases as those on which the trial depended he would not have prescribed for the children had he known the serious nature of their complaints. At present it is the practice of the firm to do as little prescribing as possible over the counter.

Pharmacalia.

PRIZES IN EXAMINATIONS AND IN LIFE.

LORD CARNARVON, while distributing the medical prizes at King's College, revived the subject originally proposed by Sir James Paget as to how far examination honours gained in early life were an indication of subsequent distinction. The question is one exceedingly difficult to determine, and the data are not sufficient by which we may arrive at a satisfactory conclusion. It seems, as far as medicine is concerned, that a very respectable average appear to fulfil the promise of their youth; and the scholar who has honourably satisfied his examiners, not unfrequently wins for himself both competence and position. Success is a bad thing at no time, and in itself is a stimulus to further effort. What has been may be again, and the student who has borne away his prizes from his school hopes, not unreasonably, by a continuance of the same exertion to gain hereafter larger and more enduring recompense. Often as we have reflected on this matter with regard to pharmacy, we have never been able to form a definite opinion, for in our vocation other elements of success are needful, besides those furnished by a course of study. Pharmacy without professional teaching would be a hopeless venture, and cases are not rare in which commercial prosperity has gilded scholastic laurels. Yet we must still allow, both as a fact and as an encouragement, that many have passed unrewarded through the school, and have yet turned out successful pharmacists. The truth is, that mental training cannot be forced into one narrow groove: to some, books and the lecture-room are an inspiration; to others, experience and rough contact with the world. One thing will be allowed, that wherever such triumphs as an examination can bestow are accepted as a tangible reward, and not as an incentive to a further struggle, the inevitable resulting failure tends to upset any fixed relationship between early and late success. It tends also to complicate the question relating to the value of the examination system. Sir James Paget stated in his original estimate, that about 600 out of 1,000 distinguished classmates were shown to have succeeded in their profession. A very good percentage. In pharmacy the average is lessened, from the fact that culture, when carried to a certain point, may lead our best students into other and more congenial pursuits. They leave our ranks, are no longer counted with us, and that excellence which may be traced to school successes is diverted into other channels. Just in proportion as professional aspirations have been gratified trade interests have suffered. Medicine, being itself a profession, is not injured by this drawback, and for this reason it is difficult for us, simply as pharmacists, to say how far honours gained at our educational centres bear upon

ultimate success. It is clear that other gains, apart from commercial pharmacy must not enter into this discussion; they are beside the point at issue. We are concerned with a wish to ascertain whether the best man for a school medal is the best man behind the counter. We say distinctly that for a given length of time he is likely to be the worst. Here is an individual who, having surmounted the drudgery inseparable from all beginnings, has caught a glimpse of the splendid developments of his subject. From that instant he has devoted his whole soul to study; it has captivated his heart and absorbed his mind; for the time it has transformed the current of his thoughts. For him it is not necessary that the tutor should stand by and urge him to persevere. Work has become pleasure, and study a fascination. In due course honours come, and friendly greetings and applause.

Meanwhile it is impossible but that his instincts should not have led him into appreciative circles, and he has enjoyed the fellowship of men engaged in similar pursuits, as eager and as enthusiastic as himself. Then comes the period when much of this must be surrendered—the studies never, but the surroundings often: and he has to betake himself to some London corner shop, or enter upon trade occupations in a provincial town.

It is to be expected that he will not at the outset take kindly to his new engagements, nor must he be judged harshly on that score. The situation is quite usual, and one that has been personally described to us often. Let such a student recollect that pharmacy is not responsible for this revulsion in his thoughts, for in the start for a subsistence most discover that poetry is one thing, bread another.

The poor curate, leaving his college-life behind him, his chosen friends, the choral service at the chapel, and the amenities of literary cultivation, is not favourably impressed with his entry into parish work. If our successful examined men and scholars, instead of relinquishing trade pharmacy or of holding it in aversion, would accept the unattractive character it first presents, as unavoidable; if they would throw the same determination into acquiring a knowledge of its details as they did with regard to their studies, they would be master of the situation, and would then find that there was no ray of abstract learning which would not directly forward their interests. In our opinion they would distance the exertions, praiseworthy in themselves, which rely solely on diligence and attention. Till this be practically acknowledged, the balance of trade success will remain on the side of industry and steadiness, while our expectations from intellectual training will be disappointed. We have never yet seen any reason why the double qualifications should not be united.

Where modern intellectual training fails as such is admirably stated in the *Medical Examiner* (May 30):—"In our opinion the fault of modern education is that there is a great deal too much learning and far too little thinking. The schoolmasters have been too officious in their interference with their young plants, have been too curious to see how the young schools are growing, too anxious to make their own influence felt and manifest, and have all the while forgotten that in the last resource each human mind must educate itself; and that though they tend and water, it is God who gives the increase."

A SUCCESSFUL DOCTOR.

Dr. Henry Jephson, of Leamington, a medical celebrity well known to the older generation of pharmacists, has recently passed away. His practice was so extraordinary that a notice of one who so directly influenced pharmacy must not be omitted. He is said to have made probably the largest income from his profession yet known, though the palm lies between him and the late Dr. Bright, of Savile Row. The death of the latter was a distinct pecuniary loss for London west-end pharmacy,

while his prescriptions were models of clearness and arrangement. We have heard it reported by eye-witnesses of Dr. Jephson that the poor ran after his carriage as it passed along. We need hardly repeat the story that Dr. Bright used to escape from his morning patients by a private door, and that two or three days would elapse, during the height of the season, before he could be consulted. Many things are noteworthy respecting Dr. Jephson. While experimenting as a young man with fulminating silver, he blew off the first and second fingers of his right hand, but the accident, which would seem peculiarly unfortunate for a physician, in no way interfered with his career. Like many of our present medico-scientific men, whose industry is almost incredible, he was always busy; and with scarcely a minute which he might call his own, passed the scantiest of leisure in his laboratory. At St. George's Hospital he made the acquaintance of Mr.—afterwards Sir B.—Brodie, and the friendship was continued till the death of the great surgeon. From the first his success was remarkable; indeed, he made his mark while an assistant in 1818 with Mr. Chambers, of Leamington. Subsequently he went to Glasgow, where he took his degree, and he was induced by a deputation of his old friends and patients not to settle at Cheltenham as he originally proposed, but to return to the town with which his name is inseparably connected. During twenty years his practice assumed so wide a range that patients came to him from all parts of the kingdom, from the colonies, and from the continent. He laboured night and day, and was honoured with receiving distant summonses for consultation—at that date a rare compliment. For these excursions he had a specially-contrived carriage fitted up with every convenience. The income he acquired approached the fabulous; for several years it was over 20,000*l.*, and once it reached in a single year the sum of 24,000*l.* In consequence of his extreme exertions his health began to fail, his sight was affected, and he became totally blind. He lived long, however, in honourable retirement, and made a most generous use of the wealth which he had accumulated. Elder pharmacists had reason to regret the withdrawal from public life of one who lived before the age of drops, and by whom concentrated mixtures were not recognised.

THE DANGER OF SALICYLIC ACID DENTIFRICE.

When a remedy has been found good for something it runs the danger of being brought into disrepute by being regarded as a panacea for all human ills. Pharmacy has its fashions as well as other things, and the present prevailing mode is salicylic acid. Dr. Buch, of St. Petersburg, deprecates its adoption as a dentifrice. A short time ago there was a warning raised against the use of charcoal. It had similar dental recommendations, namely, that it was antiseptic, and that, as far as cleansing was concerned, it was most effective. But the microscope pointed out that every particle of carbon, in however divided a state, was a small crystal, which, acting by attrition, was hurtful to the enamel. While charcoal, therefore, was said to be a fine saw, salicylic acid is now stated to be a solvent, and accordingly to be abjured. Dr. Buch mentions that he was in the habit of using a solution of three parts in one thousand of salicylic acid, a lotion of such strength being fatal to bacteria. In a few weeks he felt a curious sensation in his mouth; the teeth appeared to become softer, and on the surface something gritty was detected, there being evidently a granular formation. The Doctor believes this to be a salicylate of lime; if so, the use of the acid as a dentifrice should be discontinued.

The ex-Empress Eugénie, when in power, patronised a poudre dentifrice made from the charcoal of the willow-bark. The preparation commanded a large sale, but went out of vogue long before the fall of Imperialism.

We may here venture to allude to a preparation which, for

occasional and careful use, is a valuable remedy for yellow, blackened, and unsightly teeth. It consists of equal parts of finely-powdered wood charcoal, prepared chalk, and cream of tartar. A few applications are sufficient to effect a decided change, followed by a wash of myrrh, eau de cologne, and glycerine. It is suggested as a tried remedy, to be used when wanted, not as a toilet requisite.

ELECTION TO THE CHEMICAL SOCIETY.

The receipt of the new issue of the charter and bye-laws of the Chemical Society reminds us of the wish expressed by several correspondents to learn the method of election into that body. Already many pharmacists have been enrolled amongst its members, and we judge that some particulars would be acceptable.

At a meeting held in the rooms of the Society of Arts in 1841, and convened by Mr. Warrington, it was unanimously resolved, "That it is expedient that a Chemical Society should be formed." The late Professor Graham was in the chair, being supported by a number of distinguished chemists, most of whom have been removed by death. The objects of the Society were simply these: the promotion of chemistry and of those branches of science immediately connected with it by reading, discussion, and subsequent publication of original communications. A library and a museum were proposed, and terms of subscription were arranged. When six years afterwards, in 1847, the number of members amounted to about 300, steps were taken to obtain a charter of incorporation. Application was therefore made to the Government authorities in due form, and the Royal assent was vouchsafed. In accordance with the charter, the Society consists of fellows, honorary and foreign members, and associates.

The election of fellows is by ballot. Each candidate for admission is proposed by means of a printed form of recommendation setting forth his name, address, and occupation, to which must be appended his qualifications. These last comprise a concise statement of his position and past experience as lecturer, teacher, assistant, or student, or in connection with analytical or manufacturing chemistry. Should none of these qualifications be producible, the reasons for his desiring admission should be given. This form of recommendation must be subscribed by not less than five fellows of the Society, to three at least of whom he must be personally known. Candidates often obtain more signatures than the bye-law requires. The certificate, so attested, must be read at three ordinary scientific meetings, that on the day of election counting for one; the document is suspended in the rooms of the Society or place of meeting until the ballot has taken place. The election is not valid unless forty or more fellows vote. In case of an insufficiency of votes the candidates are again ballotted for at the next meeting. Three-fourths or more of the votes must be in favour of the candidate to secure election; less than that proportion excludes the applicant. The Fellow, when elected, is formally admitted, after the reading of the minutes, at the ordinary meetings of the Society, having signed and returned to the secretary the following obligation:—"I, the undersigned, do hereby engage that I will endeavour to promote the interests and welfare of the Chemical Society; that I will observe its laws, and, to the utmost of my power, maintain its dignity as long as I shall continue a fellow thereof." After reading aloud by one of the officers of the prescribed form of obligation, the fellow to be admitted subscribes his name to the declaration in the charter book, a friend, usually the one who has interested himself in obtaining his certificate, introduces him to the chairman who, taking him by the hand, shall say:—"I do, by the authority and in the name of the Chemical Society, admit you a Fellow thereof." The admission fee is 4*l.*; the annual subscription 2*l.*; and 20*l.* is the sum fixed for a life composition fee.

The Chemical Society includes a second grade, who are termed Associates. These are recommended by the council and are elected for in the same manner as the fellows. They are elected for a period of three years only, at the expiration of which they are again eligible for election. They are described in the bye-laws as having the ordinary privileges of fellows, so that they may neither vote in the society nor propose fellows, nor are they entitled to a gratuitous copy of the annual publications of the society. The two statements are discrepant. They have, however, the privilege of paying an annual subscription of 1*l.*, and for 10*s.* more they may receive the journal, provided always that in three years' time they have behaved properly and do not find themselves at the expiration of that time left out in the cold in Piccadilly.

The ordinary meetings take place every Thursday fortnight during the session at Burlington House, at 8 o'clock in the evening. After the meetings, tea and coffee are provided, and there is an agreeable conversaziono. A lecture on some special subject occasionally replaces the customary proceedings. The library—the regulation and appointments of which are beyond praise—is open daily from 12 o'clock to 5 P.M., and on Monday and Thursday evenings from 7 to 9. Books are allowed to be lent under certain regulations. This department is under the care of Mr. Henry Watts, who is also the admirable editor of the "Journal of the Society." A fund in aid of original research has been established, which has lately been augmented, by donations from sundry of the City Companies, and by the great liberality of the Fellows. A preparation room has been added for the accommodation of those who may wish to work on their papers experimentally—the apartment is lofty and convenient, but the apparatus and re-agents are as yet in a nebulous condition. Dr. Armstrong, one of the secretaries, has complained that authors have shown no wish to avail themselves of its resources.

THE "SCIENCE" OF THE LAST ARCTIC EXPEDITION.

Mr. H. B. Brady contributes to the "Annals and Magazine of Natural History" (June), an article on "Reticularia and diolaria (*Foraminifera* and *Polycystina*) of the North Polar expedition of 1875-76." To the record of previous researches relating to the Arctic fauna, we are now able to add three other instalments—the group of soundings in Smith Sound to the north of Baffin's Bay, a single one in Hall Basin, and, lastly, a series to the north of Robeson Channel. These extend our knowledge to the sea-bottom over more than half the interval between the most northerly point of previous researches and the actual North Pole. Two handsome volumes describing the expedition have been written by Sir George Nares. It has been suggested by reviewers that the "science" of the voyage might advantageously be collected in a separate volume, in which case a narrative of great interest would be produced, and fall into the hands of appreciative readers.

HORTICULTURAL JOURNALS.

In the leafy month of June it is pleasant to talk about the flowers. A friendly contest has been maintained during the season between two periodicals, the *Gardener's Chronicle* and the *Garden*. They have vied, and most successfully, in producing very beautiful and often striking coloured illustrations. Those are worth the attention of our readers and will gratify their taste.

The *Gardener's Chronicle* for June 1 exhibits a plate which shows a glow of colour, which bids us consider the lilies. The same journal has a lovely sketch called "Choice Auriculas" (April 27), and a third coloured plate (May 4) of *Primula acaulis*. The *Garden* has long been famous for its woodcut gravings and the clearness of its type; in addition to these attractions we have this month a glowing bunch (no other

adjective seems appropriate) of Zonal Pelargoniums, drawn by Mrs. Duffield. Special notice may be claimed for the roses (March 30), drawn by J. N. Fitch, jun. There are but three, the May Quonnell, Duchesse de Vallombrosa, and la Rosière.

Les Trois Graces might have served the artist for a title. The pharmacist will enlarge the circle of his pleasures by looking at these things. New tasselled asters (April 20) are very striking; but "Pansies as They Are" (May 4) make one long for the sweet fields. The pansies, eight in number, are drawn by H. Noel Humphreys. Bluestone (blue-self) and Robert Black (dark-self) are exceptionally lovely. Now listen to a tale of woe.

There is a plant called Summer Lady's Tresses, and by the botanist *Spiranthes æstivalis*. This rare plant is to be seen nowhere in England but in the New Forest, and it is being rapidly cleared out of its station near the Lyndhurst and Christchurch Road. In two years time not a single specimen will be found in the famous spiranthes bog. The year before last a second edition of the "New Forest Handbook" was brought out comprising a short paper on the botany of the district, the exact locality of the bog being described. In the vicinity are resident collectors of birds' eggs, plants, and whatever is marketable in London. The spiranthes unfortunately was mentioned as being quite peculiar to the New Forest and to be found in no other spot in England. Orders were received from all parts of the kingdom, and as early as May numbers flocked to the bog eager to begin the collection of specimens. I have been asked, says the narrator, "what it looked like, as a plant a few inches high, and with a lax spike of small white flowers growing in the wet, was not likely to attract much attention. In the month of August I called at one of the cottages close by and made inquiries." We went last night, was the answer, and brought out every plant that was in blossom. To the intense disgust of the inquirer, a large earthenware pan was displayed, completely filled with *spiranthes æstivalis*, roots, flowers, and all. On the table was a good handful of cut blossoms. Wishing to make a personal investigation, the visitor set off on the almost hopeless quest of rescuing a stray specimen. After wading knee deep in water for an hour or so, three were found remaining of which two were gathered and one left. The only chance for non-extinction was for young plants which did not blossom. Speedily the last vestiges will be swept away, and one of the rarest plants in the United Kingdom will be unrepresented here.

FALSE SUMBUL.

Mr. Holmes, the curator of our Society's Museum, has obligingly shown us and described the sample of false sumbul, alluded to in several of the current periodicals. It is hard to draw conclusions from any single specimen. The one which he has under examination seems more compact, heavier, and less flat generally than the ordinary commercial root. True sumbul has a curious way of disintegrating when forced apart by pressure between the hands. Nevertheless, some pieces of this sample are almost as light as the genuine article, and in appearance might easily be mistaken for it. The red colour of the tincture, however, would instantly suggest either a distinct variety or sophistication, while the flavour of the preparation, decidedly that of ammoniacum, is conclusive evidence of its spurious nature. True sumbul, like musk or abelmoschus, has a diffusible, penetrating, aromatic taste, wanting in the tincture of the false root.

OIL OF EGGS: A VALUABLE RECIPE.—A Gorman apothecary's apprentice describes the mode of preparing "oil of eggs" as follows:—"I call on the lady of the house for one dozen eggs; I boil the eggs, separate the yolks from the whites; the clerks eat the yolks, the white is for the apprentice; into the bottle I pour oil of poppy seed.—*Detroit Lancet*."

The Pharmaceutical Council.

THE first meeting of the new Council was held on June 5. Messrs. Frnzer, Hanbury, Mackay, and Rimmington were absent. Mr. Williams was again chosen as President, and the vice-presidency was also again conferred on Mr. Savage. Mr. Sandford having mentioned that Mr. Hanbury would not be able to retain the treasurership, Mr. Greenish was elected to that office. The secretary and registrar, the under-secretary, and the editors of the journal were also reappointed. Mr. Fairlie raised the question whether it was necessary that the offices of secretary and registrar should be vested in one person. He remarked on the defectiveness of the register, at least as far as Scotland was concerned, and suggested that the two offices might with advantage be separated. The President said the two offices were united in one person by the bye-laws, and the Council had no power to separate them.

LADY MEMBERS.

Mr. Hampson moved the election of a lady to membership. This raised a discussion on the recent muddle at the annual meeting. The President believed some mistake had been made, but he was not quite sure even yet that this was the case, and though he was personally in favour of the admission of women to the society, he was not prepared so to modify the constitution of the society until there was a more decided expression of opinion. Mr. Sandford said that he and Mr. Carteghe were prepared to swear before any magistrate that the voting was as it had been first declared. Mr. Mackay had also written expressing the same opinion. The President said the teller who had first given him a number had reported 59. Mr. Sandford was prepared to swear it was Mr. Wade. Mr. Fairlie was prepared to swear it was Mr. Vizer. The discussion ran on to some length, but the only point of interest which it presented was that Mr. Atkins questioned as a technical point whether the Council was bound to register a decision arrived at by an annual meeting of the Society, supposing always that the decision had been ascertained. Mr. Robbins said the charter unmistakably expressed the power of annual meetings to pass resolutions affecting the government of the Society. [No one has questioned the power of the Society to pass resolutions, Mr. Robbins; but the trouble is that your honourable Council does not seem to take much notice of them when they are passed.] Mr. Hampson's motion was put to the vote with the following result:—*For*: Messrs. Churchill, Fairlie, Greenish, Hampson, Savage, Schacht, Shaw, and Woolley. *Against*: Messrs. Betty, Bottle, Cracknell, Gostling, Hills, Robbins, Sandford, and Williams. The vote being equal, the President gave his casting vote against the motion.

Mr. Hampson next proposed the election of two ladies as associates. He said some gentlemen might be disposed to vote for this who would not vote for ladies as members. The result, however, was exactly similar.

THE CO-OPERATIVE STORES.

The Council went into committee to discuss the recent decision given against the Society by the judge of the Bloomsbury County Court in the matter of the London and Provincial Supply Association. It was afterwards unanimously resolved to appeal against the judgment. A letter was subsequently read from Mr. S. U. Jones, enclosing a resolution passed at a meeting of the Leamington chemists, urging this course.

THE ADDRESS TO STUDENTS.

It was resolved to invite Mr. Corder, of Norwich, to deliver the inaugural sessional address in October next.

APOTHECARIES' WEIGHT.

The President announced that Mr. Sandford, Professor Redwood and himself had had an interview with Mr. Farrer, of the Board of Trade, and it was understood that the Government was willing to insert a clause exempting chemists from the operation of the proposed Weights and Measures Act so far as regarded apothecaries' weight. The Government were also

willing to insert a schedule providing for the use of glass measures for fluid drachms and minims. It was doubtful, however, if such measures could be stamped.

"THE CHEMIST AND DRUGGIST'S" REPORTER.

A letter was read from the editor of THE CHEMIST AND DRUGGIST, submitting an application for the admission of a reporter from that journal to the usual Council meetings. The proposal was made, the letter stated, in accordance with the wish of many members of the society. The writer also asked if the editor would be at liberty to attend himself. Discussion of this application was deferred until next month, when Mr. Hampson will move that the request be acceded to.

MR. JOHN OWEN.

A letter was read from Mr. Owen, announcing that he had succeeded in obtaining the election of a child into the Infant Orphan Asylum, and offering his services for similar work in future. The Council passed a special vote of thanks to Mr. Owen for his assistance on the work of the Benevolent Fund.

PHARMACEUTICAL SOCIETY.*

THE ANNUAL DINNER.

ON Tuesday evening, May 14, the members and friends of the Pharmaceutical Society held their seventh annual dinner. The restaurant connected with the Grosvenor Gallery had been chosen as the scene of the festivity, and the arrangements seemed to give general satisfaction.

Mr. John Williams, President of the Society, was in the chair, and some two hundred gentlemen were present. On the right of the president sat Dr. Gladstone, President of the Chemical Society, and on his left Mr. Birkett, President of the College of Surgeons. Among the guests were, also, Professors Williamson and Odling, Dr. Seaton, the medical officer of the Local Government Board, Dr. Swaine Taylor, Dr. Langdon Down, Mr. Erasmus Wilson (President of the Medical Society), the Dean of the College of Preceptors, Dr. de Vrij, and Dr. Leared. A selection of music was performed during the evening, under the direction of Mr. Winn, the vocalists being Miss Anne Sinclair, Miss Orridge, Mr. Montem Smith, Mr. Fred Walker, and Mr. Wiun.

After dinner, which was not concluded till a rather late hour, in consequence of unpunctuality in commencing, the chairman gave very briefly, "The Queen," "The Prince and Princess of Wales," and "The Army, Navy, and Reserve Forces." In replying for the last Dr. Ramsay said he had reason to know that never had the British army and the British navy been better prepared to go to war. He knew, too, that the volunteers, many of whom he saw around him, were all ready to serve their country.

Mr. Schacht proposed the next toast, which was "Science." He said the subject which had been committed to his charge should have been left to the chair, for in their president they had a gentleman who not only had himself rendered eminent services to the promotion of science, but whose firm had always shown much munificence in placing the resources of their laboratory at the disposition of other men of science. The fact that he (the speaker) had been chosen to propose this important toast was not on account of any special fitness for the duty which he possessed, but rather for the reason that, by the indulgence of his fellow-pharmacists, he had this year the good fortune to occupy the position of president of a society which had for its special object the promotion of the scientific side of pharmacy. But he need not feel nervous in proposing this toast, inasmuch as it would be associated with the names of three men so distinguished as those put down to reply for it—men who had earned a title to reply to such a toast. Our calling as pharmacists was a somewhat complicated one; it was a trade, an art, and a profession; the same man might act as a retailer, a manufacturer, a consulting chemist, and, to some extent, as a medical adviser. It was not his fault or desire that he had to take up this last occupation: it was the public which determined that he should do so. Whether we liked it or not, therefore, we were compelled to study something of that which the men of science revealed to us; and it was

* This report was unavoidably crowded out of our Special Issue of May 18.

we hoped that we should not limit our studies merely to acquaintance with the facts and phenomena discovered by scientific investigation: we should aim to discover the soul of science, and by seeking to learn something of the elements of truth and beauty which science had made manifest, we should in the rarest manner refresh our own spirits. He asked all present to testify by their enthusiasm their appreciation of this opportunity of doing honour to science in the persons of such eminent representatives as those who had given them their company. He associated with the toast the names of Professor Williamson (the Foreign Correspondent of the Royal Society), Gladstone (the President of the Chemical Society), and Dr. Frankland.

Professor WILLIAMSON remarked on the different senses in which different people used the word science. Popularly it was supposed to be something of a very abstruse character, interesting only to the old gentleman who followed it, and of no possible use to any one. Others regarded science as calculated to render followers conceited, combative, and unsociable. In this latter respect the distinguished representatives of the scientific body before him could not be classified. Within the past 20 years the social tendencies of scientific men had considerably deepened, a fact of which this gathering was a witness. He begged leave to bear his testimony to the benefits due to the Pharmaceutical Society. It was a society not only active in collecting and disseminating the knowledge of science, but it was also an eminent educating body, and he recognised the high rank of its professors.

Dr. GLADSTONE also responded. He said he owed the association of his name with the toast to the fact that for the time being, he happened to occupy the position of president of the Chemical Society. In coming among them that evening, scientific chemists must feel as if they were visiting their elders. He did not know when they dated the origin of pharmacy, but he knew that one of the curious things taught them in old Egyptian and Chinese archives was that the medicine of these old days was not far different from that which now existed. In continuing to speak of the development of science, Gladstone remarked that as chemistry had been able to build up Turkey red for writers, and vanilla for confectioners, he believed it would some day build up quinine for pharmacists.

Mr. SANDFORD proposed "The Medical Profession" in complimentary terms, and asked those present, notwithstanding the recent alarming lecture of Dr. Carpenter on the poisonous effects of alcohol, to drink this toast in a bumper.

Mr. JOHN BIRKETT, president of the College of Surgeons, and Dr. SEATON, medical officer to the Local Government Board, responded. The latter said that his old friend Sir B. Brodie, addressing a number of young men, told them once, gentlemen you have chosen a very bad trade but a very noble profession. Both gentlemen spoke in cordial terms of the Pharmaceutical Society.

Mr. ERASMUS WILSON proposed "The Pharmaceutical Society." He said he should hardly have presumed to have chosen this important toast, but since it had been allotted him he knew of none to which he could address himself with greater satisfaction. He traced the history of the Pharmaceutical Society from the date of its foundation in 1841, "when the scattered sticks were first gathered into the traditional bundle;" and he gave a glowing account of its present position and virtues, saying that it had gained the fullest confidence of the medical profession, round which it had thrown its silken fetters. We know, he continued, that our prescriptions and our honour are perfectly safe in your hands.

The PRESIDENT said he was not capable of responding to this toast in a speech corresponding to the eloquent one in which it had been proposed. The hour was late, and he thought he could best consult the wishes of his hearers if he merely acknowledged the kind expressions which had been used towards the Pharmaceutical Society.

The remaining toast, were "The Honorary Members," proposed by the Vice-President, and replied to by Dr. Odling; and "The Visitors," proposed by Mr. Atkins, and replied to by Dr. Leared.

THE CONVERSAZIONE.

It was announced, this annual gathering was held at South Kensington on Wednesday evening. About 2,400 were present. The chief excitement of the evening was the rumour that there had been a blunder in recording the votes at the general meeting on the question of admitting women as members.

The Chemists and Druggists' Trade Association.

MEETING OF THE EXECUTIVE COMMITTEE, BIRMINGHAM, MAY 27, 1878.

Present:—Mr. S. U. Jones, President, in the chair; Mr. Thomas Barclay (Birmingham), Vice-President; Messrs. Andrews (London), Arblaster (Birmingham), Churchill (Birmingham), Cross (Shrewsbury), Cubley (Sheffield), Delves (Exeter), Greaves (Chesterfield), Greenish (London), Hampson (London), Holdsworth (Birmingham), Jervis (Sheffield), Kerr (Dundee), Mackenzie (Edinburgh), Shaw (Liverpool), and the Solicitor of the Association.

The minutes of the previous meeting of the Executive were read and approved. The following resolutions were passed:—

That the officers of the Association, together with Mr. Churchill, form a Finance Committee for the ensuing year.

That the officers of the Association, together with Messrs. Churchill, Greenish, Hampson, and Jervis, with power to add to their number, form a Law Committee for the ensuing year.

That the officers of the Association, together with Messrs. Andrews, Arblaster, Brevitt, Churchill, Cross, Cubley, Fairlie, Greaves, Greenish, Hampson, Jervis, Reynolds, and Shaw, form a General Purposes Committee for the ensuing year.

The President said the gentlemen present would be aware that the case of the Apothecaries' Company v. Wiggins had been heard in the High Court of Justice at Westminster some few days previously; that the decision of the jury had been in favour of the plaintiffs, and that the defendant had been fined 20*l*. He should like to hear any remarks their solicitor might have to make on the subject.

The Solicitor said when he last met the committee he was hopeful that the Association would have the services of Sir Henry James, but as the case did not come on so early as was expected, the learned counsel, in consequence of other engagements, was compelled to return the brief. He subsequently instructed Mr. McIntyre as leading counsel for the defence, who conducted the case to his satisfaction, and, he hoped, to the satisfaction of the members of the Executive who were present at the trial. Four cases, in which the defendant was alleged to have acted as an apothecary, were brought forward by the plaintiffs. After hearing the evidence in these cases, Mr. Justice Field left it to the jury to decide two matters—first, whether the defendant had acted and practised as an apothecary; and, secondly, whether such acting and practising came within the exception contained in section 28 of the Apothecaries Act, 1815, which was the statute under which the proceedings were taken. The jury found that "the defendant had acted and practised as an apothecary in taking cases that were dangerous." There was no attending or visiting outside the shop, no consulting-room, and no use of instruments proved in the case.

Mr. Shaw said that the prosecution in that case was quite at variance with the profession of the Apothecaries' Company, as they had stated it was not their intention to prosecute except in cases where there had been visiting.

In reply to a question, the solicitor said he did not consider there was any point in the case on which the Association could go to the Court above; there was no misdirection by the judge; the verdict could not be disputed on the ground that it was against evidence, nor had the judge excluded any evidence; indeed, although the admission of evidence of the practice of chemists and druggists prior to 1815 was objected to by the counsel for the plaintiffs, Mr. Justice Field admitted it, and the jury found that the defendant did not come within the exception provided by the 28th section of the Act. They had in the contest enforced the admission of the evidence of custom, but the jury had found that the cases treated by the defendant were not similar to those which chemists treated prior to 1815, inasmuch as they were not simple complaints. It would appear that chemists might treat any person for a simple complaint, but if the same turned out afterwards to be dangerous they ran a risk of being prosecuted, and a jury might find that the cases did not come within the scope of the 28th section.

Mr. Hampson said if funds permitted he thought it would be advisable to carry this case to a superior court. The present state of society compelled a chemist to prescribe, and it was utterly impossible for a chemist to discover the malignity of a

complaint or to anticipate the character it would develop when applied to in its earliest stages. He heard the evidence given by the plaintiff's witnesses, and he considered all the cases which Mr. Wiggins had treated were cases that would have been treated by chemists generally, from necessity, in poor districts. The Association had, he thought, done well in defending Mr. Wiggins, and he would remark that there was no assumption of title in the case, and no guise of quackery, all the witnesses for the plaintiff went to Mr. Wiggins knowing him to be a chemist, and in that capacity they sought his advice and purchased his medicine.

Mr. Greenish said he thought Mr. Wiggins had done what any chemist in the country would have done.

The Secretary said that Mr. Justice Field remarked during the hearing of the case that no blame was to be attached to Mr. Wiggins.

Mr. Greaves said it could not for a moment be doubted that chemists had a right to prescribe; were that right removed the poor would be unable to get any medical advice, not having the means to pay a medical man. If they looked upon the broad side of the question, they would see that it would be absolutely impossible for a chemist to carry on his business without prescribing.

Mr. Barclay said he regretted very much that it was their solicitor's opinion that it would be useless to appeal the case, and he would move—

That the finding of the jury in the case of the Apothecaries' Company v. Wiggins being as follows—"We find the Defendant acted as an apothecary in taking cases that were dangerous," this Committee is of opinion that no further steps should be taken in this action, but re-affirms its decision to defend the case of the Apothecaries' Company v. Shepperley now pending.

This resolution was seconded by Mr. Cubley and unanimously resolved.

Some considerable discussion took place on the Duke of Richmond's Medical Act (1858) Amendment Bill.

It was moved by Mr. Hampson, seconded by Mr. Delves, and unanimously resolved—

That the Law Committee be empowered to consider and watch the Medical Act (1858) Amendment Bill, introduced into the House of Lords by the Lord President of the Council, and take any steps either to promote or oppose the Bill as it may deem advisable.

Mr. Hampson said he was exceedingly sorry to announce that the case of the Pharmaceutical Society v. the London and Provincial Supply Association had been decided against the interests of the trade. It would be admitted that the question as to whether co-operative traders should be permitted to deal in scheduled poisons was of great importance to duly qualified chemists and druggists.

It was moved by the president, seconded by Mr. Barclay, supported by Mr. Holdsworth, and unanimously resolved—

That this Committee, viewing with the gravest apprehension the decision in the case of the Pharmaceutical Society v. the London and Provincial Supply Association, respectfully urges the Council of the Pharmaceutical Society to appeal to a superior court and endeavour to reverse this decision. Failing success, this Committee trusts steps will be taken by the Pharmaceutical Council to obtain an amendment of the Pharmacy Act (1868) to protect the trade and the public from such practices, which are entirely opposed to the spirit and intention of that Act.

It was moved by Mr. Jarvis, seconded by Mr. Cross, and unanimously resolved—

That the Secretary be instructed to communicate with the members of the General Committee requesting them to take steps to convene meetings of the trade in their localities, with a view to request the Council of the Pharmaceutical Society to endeavour to reverse the decision in the case of the Pharmaceutical Society v. the London and Provincial Supply Association, and, if found necessary, to amend the defective clauses in the Pharmacy Act.

The solicitor, secretary, analytical referee, auditors, and bankers were re-appointed.

The question of the best means of raising funds to prosecute the appeal in the case of the Apothecaries' Company v. Shepperley, in order to obtain a final decision on "Counter Practice," and to be in a position to take action in other cases as they may arise, was fully discussed. It was the opinion of the gentlemen present that there was scarcely a chemist in the kingdom who would not assist the Association with funds to protect the interests of the trade so seriously threatened.

It was moved by Mr. Barclay, seconded by Mr. Churchill, and unanimously resolved—

That the General Committee be requested, at this critical juncture of the trade, to do their utmost, by public meetings, personal canvass, &c., to obtain an accession of strength in the shape of members, and also to aid in raising the Special Fund of 2,000*l.* which is urgently required to enable the Executive of the Association to defend the interests of the trade.

It was moved by Mr. Greenish, seconded by Mr. Greaves and unanimously resolved—

That an abridged report of the case of the Apothecaries' Company v. Wiggins be drafted under the direction of the Finance Committee and circulated among the members of the trade, with a strong appeal for additional funds.

It was moved by the President, seconded by Mr. Barclay, and unanimously resolved—

That the Executive of this Association respectfully asks the Council of the Pharmaceutical Society to aid it by a donation in prosecuting the appeal in the case of the Apothecaries' Company v. Shepperley, the issue of which it considers to be of vital importance to chemists generally.

The Secretary reported having received from the Secretary of the Newcastle-on-Tyne Chemists' Association the following resolution, which was passed at a meeting of the chemists and druggists of Newcastle and neighbourhood:—

That this meeting would view with satisfaction any assistance which the Pharmaceutical Council might give to the Chemists' and Druggists' Trade Association in conducting the trial now pending in relation to "counter prescribing."

Communications were read from several members, and the secretary was instructed how to proceed in each case.

Provincial Reports.

BRISTOL.

SERIOUS CHARGE AGAINST A CHEMIST.—A chemist's assistant, named John Cook, of Castle Street, has been tried before the Bristol magistrates, along with a young man named Newman on the charge of administering certain noxious drugs to Veronica Sidey, with intent to produce abortion. The girl gave evidence that Newman had brought her several bottles of medicine, and that she had received one bottle direct from Cook, who, she said, took her into a room near the shop in Castle Street and examined her, and said she was pregnant. She threw away that medicine, as it made her sick, but some of the rest had been analysed by Mr. Stoddart, who proved that the effect of the mixture contained in one of the bottles would be to procure abortion. In cross-examination he admitted that the ingredients were used for other complaints. Cook was eventually discharged, and Newman was committed for trial, bail being accepted.

ONE of the bears in the pit at the Clifton Zoological Gardens was found dead towards the end of May, and an examination by Mr. W. W. Stoddart, city analyst, showed the animal had been poisoned by means of arsenic.

CHESTERFIELD.

CHEMISTS AND UNCERTIFIED DEATHS.—The Chesterfield Registrar, in answer to an inquiry why the causes of so many deaths were uncertified in his district, says:—"It is in consequence of Mr. —, a druggist, attending so many young children in sickness, and others as well, he being much thought of among the working classes."

CRICKLADE.

ALLEGED MISREPRESENTATION OF A CHEMIST'S BUSINESS.—On May 25, a singular charge of fraud was heard at the Petty Sessions. Mr. Wm. Honey Hayward, chemist, at Trowbridge, recently purchased a chemist's business at Cricklade for 160*l.* from a Mr. Morgan on the representations of Mr. and Mrs. Morgan, that the returns were 6*l.* to 8*l.* per week, and not 7*l.* to 10*l.* as stated in their advertisement; and also that there were valuable specialties connected with it. Finding that the returns had been misrepresented (having never exceeded 2*l.* in the previous six months), and that on some days not a penny

been taken, and that since he had re-stocked the shop and
erly attended thereto, the returns only came up to 2*l.* 17*s.*
layward endeavoured to get an explanation, and failing
summoned the two defendants for obtaining 100*l.* by false
nces and attempting to obtain the 60*l.* balance by similar
sentations. Mr. Ellett, Cirencester, prosecuted, and Mr.
s, barrister, defended. The bench dismissed the case, on
round that there was *some* original business, and it could
have been exaggerated, for which the remedy was a civil
a.

DUBLIN.

AQUILLA SMITH, vice-president of the Pharmaceutical So-
of Ireland, has been awarded a "Cunningham Gold Medal"
e Royal Irish Academy, in recognition of the value of his
rches into Irish numismatics.

EDINBURGH.

RLY in May a School of Pharmacy and Chemistry was
ed in Marshall Street, Edinburgh, to prepare students for
major and minor examinations of the Pharmaceutical
ty. The lecturers are Mr. R. Urquhart in *Materia Medica*,
T. W. Drinkwater in Chemistry, and Mr. D. McAlpine in
ay. Dr. Charles Bell has commenced, in the hall of the
school, a qualifying course of lectures on Midwifery and
Diseases of Women and Children.

GATESHEAD.

PLIED CHEMISTRY.—On May 24, William Lewis, said to be
mical labourer, was charged before the Gateshead magis-
s with assaulting a hailiff, and secretly removing his furni-
with intent to defraud his landlords, Messrs. McDermott,
s & Co., of 2*l.* 11*s.* rent due. Two hailiffs were put in po-
sion of the house of the defendant at 11 A.M. When the
r returned from his work he told his wife to leave the
e, tied a towel over his mouth and nose, placed some
ical preparation (nature not revealed) in a dish, and,
ng water on it, created such a malodorous vapour that an
natic hailiff beat a hasty retreat to the hackyard and nearly
ed there. The other having stronger lungs got outside the
and hung on by the handle, keeping one foot inside, and so
ening possession. The defendant brought his apparatus
under the nose of this determined man, but finding that
ould not be dislodged by it pushed the foot in possession
le the door, in this way committing the assault. The
e dant's furniture had been valued at 3*l.* 12*s.* 6*d.* The
strates sentenced him on the double charge to pay 7*l.* 5*s.*
e the value of his furniture, and in default of payment to
aprisoned for six months.

GLASGOW.

E CITY PARISH DISPENSER IN TROUBLE.—W. T. Hyne,
nser at the dispensary, 33 Irongate, Glasgow, was sen-
ed on May 29, to thirty days' imprisonment, under the
owing circumstances:—

Saturday night or Sunday morning, May 18 or 19, Hyne
took a young married woman named Alice Kerr walking in
brongate with another "young girl" and a young man. He
ed Alice Kerr to come to his house (the dispensary), but,
e refused to come alone, he included her companions in the
ntion. He took them in, turned up the gas, and gave each
m ten fluid drachms of whisky, which had been placed under
arge for the use of the patients. The dose was repeated
or nine times, and he then proceeded to administer wine.
many doses were taken the witness was too drunk to
mber. About 2 A.M. another girl, who had been calling to
from the street, was asked to join the party. After dis-
ting the whisky, Hyne gave his friends some honey "to

He heard the child of Alice Kerr cough, and gave her
ough mixture for it, and hearing that she had another
at home which was rather sickly, he put up some chemical
for it. Besides this, he gave witness some wine to take
with her.

2 A.M. the policeman on the beat knocked at the door, and
old that all was right, and at 4 A.M. a sergant and detective
to the place, and found all the party in such a condition
they did not know how they had come there.

was further stated that beside the whisky and wine con-
d, the stocks of gin and brandy were also deficient.
once of the highest class was given of the previous good

character of the defendant, and, in summing up, the Stipendiary
said that he should not convict the prisoner for the theft of the
gin, brandy, cough mixture, or chemical food, though he felt
compelled to consider proven the charge of breach of trust, and
embezzlement with regard to the whisky, wine, and honey.

THE APOTHECARIES' HALL DESTROYED—DAMAGES 30,000*l.*—

A fire of a magnitude most unusual in the drug trade destroyed
the whole stock and premises of the Apothecaries' Company in
Virginia Street, Glasgow, on Saturday, June 8. The company
has been in existence upwards of 80 years, during 67 of which
it has been located in Virginia Street. The building, known as
the Apothecaries' Hall, and just destroyed, had been occupied
by the company for 22 years. It was three storeys in height, and
had a frontage of 70 feet. The street flat was occupied as
a shop, the remainder being devoted to laboratories and store-
rooms. Immediately to the north is the Corporation Gas Com-
pany's Office, and to the south the City of Glasgow Bank, while
behind, and closely adjoining, are the premises of Mr. Kennedy,
printer, and separated by a narrow court are the Glassford
Street tenements. At three o'clock in the morning smoke was
observed issuing from the windows of the hall, and notice was
at once given at the Fire Brigade Office. No time was lost, but
when the brigade had reached the spot the flames had obtained
so strong a hold on the building and its inflammable contents
that it was evident that nothing could be done to save them.
The attention of the firemen was turned mainly to
prevent the very serious conflagration which would have
been caused by the spread of the flames. Even this
work was a difficult and somewhat dangerous one.
The heat was so great that the lead roofing of the Crown Court
Buildings on the opposite side of Virginia Street melted and
dropped into the roadway. The wind driving the flames in this
direction caused these buildings to be more damaged than those
next the hall itself. The roof of the Gas Office was somewhat
damaged, and the glass in the dome of the City Bank was
broken, while in the Crown Court Buildings almost all the
windows were broken, and much of the woodwork damaged.
For nearly two hours there was little diminution in the flames.
After that time they lowered considerably, and in another hour
the engines were withdrawn, as it was considered that the water
obtained direct from the street plugs would be all that was
required. During the whole of Saturday water was poured on the
smoking *débris* from four sets of hose, and men were kept on
duty at the place for some days after. When the conflagration
was at its height the neighbourhood for a large distance around
was brightly illuminated. At times Virginia Street was ablaze
with oil flowing from the burning building, and the air in the locality
was laden with the perfumes which formed part of the stock.
Owing to the time at which the fire occurred there were very
few spectators, but on Saturday and Sunday the scene of the
disaster was visited by thousands of persons. The total
damage done to stock, buildings, &c., amounts to 30,000*l.* The
stock, which had just been taken, is valued at 21,000*l.* The
insurance amounts only to 26,000*l.*, leaving a deficiency of
4,000*l.* Pending the rebuilding of the premises in Virginia
Street, the company has secured a temporary warehouse for the
wholesale department at 62 & 64 Miller Street, and a building
for the retail at 5 Dunlop Street, both near the old premises.
One of the firemen, named Jardine, while at work sustained
somewhat severe injuries. He was making his way through the
roof of the Gas Office, when some large panes of glass above
broke, and a large piece fell on his arm, inflicting a bad cut.
The wound was dressed by a surgeon, and, with this exception,
no damage to life or limb occurred.

LIMERICK.

A PHARMACEUTICAL PARAGON.—The following letter, says the
Limerick Chronicle, was received by the Guardians in reply to
an advertisement for a resident apothecary:—

3 Molesworth Street, Dublin, 7
June 4, '78.

GENTLEMEN,—Having seen your advertisement for a resident apothecary
and pharmaceutical chemist for the Limerick Workhouse, I beg to offer
myself for the appointment, and to state my qualifications. I am a member
of the Pharmaceutical Societies of Great Britain and Ireland, and have been
for ten years superintendent of the Liverpool General Dispensary, where
over 300,000 prescriptions are compounded annually. I have been engaged
for three years in practical chemistry as assistant in the laboratory of the
London Apothecaries' Hall, and am perfectly competent to analyse and
detect impurities in drugs and food—qualifications which you must admit

are of the most vital importance in this age of adulteration and jobbing. I consider that 100*l.* per year which you offer entirely too little; however, as I am anxious for the sake of suffering humanity that the poor inmates of the Charitable Institution should have the very best aid, in my particular department of the profession, I am willing to accept it with weekly rations as follows:—Monday—Mutton; Tuesday—Bacon and chickens; Wednesday—Do.; Thursday—Lamb or fed veal; Friday—Fish; Saturday—Corned beef; Sunday—Roast beef and half a pint of sherry. Not being particular as regards table drink, I shall feel quite satisfied with Guinness' or Bass'.

I am, gentlemen, your obedient servant,

ROGER M. GREEN.

If this letter had been genuine it would have been amusing, but as Roger M. Green does not appear on the Pharmaceutical Register we conclude that the application is nothing better than a poor hoax. It would be interesting to know, however, what is the fun of dating this small joke from the same address as that of the Dublin publishing office of the *Medical Press and Circular*.

MALMESBURY.

THE JACKDAW IN PEACOCK'S FEATHERS.—At the County Court last month, Silvester Fulda, a Jew, and describing himself as a "professor of chemistry," sued a bacon curer for 4*l.* on a deed of agreement. Mr. Adye, the defendant, had purchased from the professor a recipe for destroying hoppers in bacon and hams. He had given him 3*l.*, and had promised 4*l.* more in six months if the process should turn out satisfactory. When cross-examined, Silvester's feathers were ruthlessly plucked. He had been a traveller for Harper Twelveteers, had taken no degrees in chemistry, had given a vague London address, and kept his home barred up against the minions of the law. He submitted to a non-suit.

MONMOUTH.

SUPPOSED DEATH OF THE BOROUGH ANALYST.—On Whit-Monday much excitement was caused at Monmouth by the receipt of a telegram stating that a canoe, together with some linen, had been discovered floating near Tintern Abbey. It was known that a Mr. Jones, a chemist and borough analyst, had started from Monmouth on last Saturday evening in his canoe for Bristol. The linen picked up with the boat was marked with that gentleman's initials. Fears are consequently entertained that he has been drowned.

NOTTINGHAM.

NOTTINGHAM AND NOTTS CHEMISTS' ASSOCIATION.—The annual meeting of this Association was held on Friday, May 31, the chair being occupied by the Vice-President, Mr. R. Fitz Hugh, F.C.S., and there was a moderate attendance of members. After the transaction of some preliminary business, the Hon. Sec., Mr. R. Jackson, read the Annual Report of Council.

It appears that both numerically and financially the Association is in a better position than last year. There are 58 members and 22 associates, and the treasurer reports a balance of 48*l.* 7*s.* 2*d.* At the first meeting of the session the attendance was so meagre that the President declined to give his inaugural address, and the meeting was adjourned and a committee appointed to wait on the absenters. This brought about the largest assemblage of Nottingham chemists ever held. After an able address from the President, a discussion took place on the best means of keeping up the interest, and it was decided that scientific meetings should be held alternately with social meetings. This arrangement appears to have worked well, and the report urges that every member who attends the social meetings should make it a point of honour to attend the educational ones also.

The Association gives certain prizes to associates, who are recommended to attend the lectures at the Mechanics' Institute. Mr. William Widdowson kindly offers, during the summer, to take the associates on a botanising excursion every other Tuesday afternoon, from 2.30 till 5, and the council hope that every member will give all possible facilities for his apprentices to join the class.

The report concluded with a cordial reference to the invaluable services to the Association of Mr. Atherton, who has recently left the town.

The following officers were appointed for the ensuing year:—President, Mr. R. Fitz Hugh, F.C.S.; Vice-President, Mr. Frank White; Treasurer, Mr. J. Rayner (re-elected); Hon. Secretary, Mr. R. Jackson (re-elected); Auditors, Messrs. J.

Thomas and M. H. Humphreys; and Council, Messrs. Bolton, T. B. Fletcher, Jenkins, Lewis, Smith, Warriner, H. Widdowson and Wilford.

The President then proposed a hearty vote of thanks to Messrs. W. Widdowson, R. Widdowson, and James Beardsley for their exertions on behalf of the associates and the valuable assistance they had rendered the class; this was seconded by Mr. Smith, and supported by Messrs. Ward, Lewis and White, and carried unanimously.

Mr. W. Widdowson responded in a short speech.

Mr. Ward, Mr. Smith and Mr. Wilford each offered prizes for competition amongst the associates, next session, in Pharmacy, Botany and Chemistry.

A vote of thanks to the Executive and Council for their past services, brought the meeting to a close.

ROTHERHAM.

THE MOON AND MEDICINE.—The following extraordinary epistle was addressed a few days since by a parent at Rotherham to the mistress of one of the Board Schools in that town:—"Dear Sir, Myra and Delia are unable to attend school, they have some powders to take at full of the moon, and have to be in bed at two o'clock." The school attendance officer visited the house, and found the children in bed at the time indicated.

AT THE POLICE COURT on June 13 John Colbeck, chemist and druggist, Kilnhurst, was summoned for selling four ounces of adulterated sweet spirit of nitre to Mr. Supt. Gillett, on May 17. Mr. Gillett submitted the nitre to the West Riding analyst, Mr. A. H. Allen, Sheffield, and the result of his analysis showed that there was only 51.3 per cent. of alcohol in the nitre, instead of there being more than 80 per cent. Mr. Colbeck stated that he sold the spirit just as he purchased it, but he was fined 40*s.* and costs.

FORMULÆ OF SECRET MEDICINES.

(Continued.)

The formulæ given below are translated (by special permission of the author) from a German collection compiled by Mr. Edward Hahn, Apotheker. The names following most of the formulæ are those of the authorities quoted for the analysis. The weights are almost invariably given in metric denominations. A gramme is equivalent to 15½ grains. The prices quoted are the nearest English equivalents to the original retail price.

EMBROCATION QUESTIONNAIRE is a mixture of sulphuric acid and 90 per cent. spirit, of each 1 part; olive oil and turpentine, of each 8 parts.—Hager.

ENAMEL OF AMERICA (François Gregoire & Co., Philadelphia).—A washing liquid. A clear, colourless fluid, free from hurtful metals.—Chandler.

SNOW-WHITE ENAMEL FOR WHITENING AND BEAUTIFYING THE COMPLEXION (Phalon & Sons, New York).—A colourless fluid, containing 37½ per cent. of lead carbonate.—Chandler.

DR. BRADFORD'S ENAMELINE FOR THE COMPLEXION.—A colourless fluid, containing 6.6 per cent. zinc oxide.—Chandler.

ENCRE POUR LES DAMES (Quesneville, Paris).—An aqueous solution of soluble iodide of starch, specially intended for ladies' love letters. In four weeks characters written with it disappear, preventing all abuse of the letters, and depriving the lover of all documentary and special pretension to the possession of the heart of his mistress. The signers of bills of exchange who use this ink are freed from all obligations in the same length of time.—Hager.

ENGLISH PATENT WASHING CRYSTALS.—6 parts soluble glass, 29 parts anhydrous washing soda, 60 parts bicarbonate of soda, 5 parts water. 60 grammes, 3*d.*—Hager.

ENGLISH HORSE-BALLS OR HORSES' PURGING BALLS.—500 parts aloes, 50 parts gamboge, 120 parts soap, 15 parts oil of anise, 10 parts glycerine, 5 parts aniseed, made into a mass with brandy and divided into 30-gramme balls.—Hager.

"ENGLISH PINKICKS" (!) are horse-balls consisting of Bar-

s aloes, 25 grammes; green soap, 10 grammes; ginger, 5 mes; oil of earaway, 20 drops.—*Hager*.

U DENTIFRICE (Pierre, Paris).—15 grammes star anise are used with 200 grammes 90 per cent. spirit, the solution is red with aniline red, filtered, and 60 drops each of star oil and peppermint oil are dissolved in it. 100 grammes, *d.*—*Hager*.

THAARUNGSMITTEL RUSMA—DEPILATORY RUSMA—(Edm. Igen, Leipzig).—A mixture of 2 to 3 parts sulphide of arsenic 15 parts powdered caustic lime, 3s.—*Hager*.

HUR'S EPIDERMATON.—For tetter, freckles, &c. A nearly and colourless fluid, containing traces of ammonia, soda, some alumina, and .08 grammes benzoic acid. The greyish precipitate, weighing .83 grammes, consists chiefly of a resembling benzoic. 300 grammes, 2s.—*Hager*.

ADE'S OR ARNIM'S CURE FOR EPILEPSY.—Small pieces of are soaked in a solution of 150 grammes of liver of in $\frac{1}{2}$ litre of spirit, to which some birch tar is sometimes *d.* If this should not be successful powders are adminis- made from a mixture of 15 grammes of flowers of ur, with 500 grammes of sugar of milk. The pamphlet iving these remedies is sold at 3s.—*Hager*.

RE FOR EPILEPSY (D. Besser, Berlin).—30 grammes spirits mphor, coloured red. 1s. 6d.—*Schüdler*.

RE FOR EPILEPSY (Durand).—600 pills, the chief in- ent of which is an extract of *galium palustre* (marsh goose- s), to be followed by a few purging powders. They must ken at the time of full moon in a decoction of the chopped d leaves of the ash (*Fol. Fraxini Excelsior*).—*Hager*.

RÖNDHOFF'S EPILEPSY CURE.—A linen bag to be worn at the of the stomach for six months. It contains ambergris, ammes; crabs' eyes, red coral, peony seed, broken small, of 1 gramme, with 7 peony seed-vessels. 1s.—*Hager*.

EPILEPSY CURE (J. H. Hoesch, Cologne).—A mixture of 0 parts provence oil, 250 parts sugar, 15 parts arrow-root ; oak mistletoe, florentine orris-root, zedoary, of each 5 ; 750 grammes. To poor people at their first purchase, Z. each; following purchase, 6s. According to Wittstein's eranalysis nothing but a mixture of 8 parts olive oil, 1 part r. Sold in winebottles at 18s.—*Hager*.

EPILEPSY CURE (Moritz Holtz, Berlin).—12 flasks, each con- ng 5 grammes bromide of potassium dissolved in 150 mes water. 30s.—*Hager*.

EPILEPSY CURE (C. Jacoby).—Two boxes of pills, 60 in each. e the pills are rolled in powdered orris; in the other they lvered; one is for cure, the other for convalescence. In cases the 60 pills are made from 3 grammes zinc oxide, mmes calcium phosphate, .5 gramme rhubarb, .5 gramme ort root. 9s.—*Kranier*.

EPILEPSY CURE (Dr. Killisch, Berlin).—200 grammes water, grammes potass. bromid., .03 gramme atropine sulphate; last is sometimes absent. It is also met with slightly red with indigo. Very costly. Price not fixed.—*Hager*.

EPILEPSY CURE.—New and valuable remedy for epilepsy or g sickness, and also for all kinds of nervous diseases, ted by the renowned Doctor and Professor G. Paoli, Rome, made and sold by Rigotti, Apothecary, Fiume. The powder sts of 10 parts valerian root, 2 parts peony root, 2 parts abacca root, 2 parts arum root, 2 parts wormwood root, 1 cinnamon, 30 parts sugar, 1 part ammonium valerianate aps produced by the action of ammonia gas on the pow- d root). 125 grammes, 20s.—*Hager*.

EPILEPSY CURE (Quante, Warendorf).—Rectified petroleum red with alkaneet with an insignificant proportion of a ing animal oil. With it is found a printed recipe for a o be made of equal parts of linden flowers and pansy. 15 mes, with the recipe, 15s. Other recipes, also against psy, are: (1) Potassium bromide, ammonium bromide of .015; zinc valerianate, .06; wormwood root, .62; M.D.S. l. succini, rect., 11.0.—*Hager*.

EPILEPSY POWDER (The Dresden Deaconesses' Institution).— ggpie shot on Twelfth-night, burnt to a coal.

EPILEPSY POWDER (Count Duplessix-Parceau).—A mole ed black, or, according to Ganger, rats dried, half burnt, powdered.

EPILEPSY POWDER—PLEIS' FIT POWDERS.—24 brown powders, very variable in weight, each containing on an average .4 grammes potassium bromide, and 1 gramme brown bitter organic powder mixed with sugar and containing a trace of iron oxide (gentian powder). According to Miller it is a powder of potassium bromide and gentian extract.—*Wittstein*.

EPILEPSY POWDER—POUDRE UNIQUE (Godernaux. Is sold at the Pharmacie Rue de la Feuillade 7, Paris).—Powders, each containing 5 grammes calomel. 12 powders, 18s.—*Apoth. E. Z. in P.*

EPILEPSY POWDER (Ragolo. Manufactured originally at Nürnberg, then at Lübeck, latterly at Hamburg by a certain Eckhorst).—According to Knopf:—Valerian root, 60 parts; orange leaves, 20 parts; sal ammoniac, 2 parts; cajeput oil, 3 parts. According to Sundelin:—Valerian root, 12 parts; magnes. carb., 3 parts; sal ammoniac and cajeput oil, of each 1 part. According to Gmelin and Feuerstein:—Valerian root, 60 parts; sal ammoniac, 6 parts; magnes. carb., 6 parts; cajeput oil, 3 parts. According to Radius:—Valerian root, 18 parts; orange leaves, 6 parts; magnes. carb. and cajeput oil, of each 1 part. According to Hager:—Chalk, 20 parts; magnes. carb., 10 parts; peony root, 30 parts; orange leaves, 30 parts; oak mistletoe, 30 parts; ammon. carb., 3 parts; sal ammoniac, $\frac{1}{4}$ part. Original price, 3 louis d'or (about 50s.), gradually lowered to a thaler (3s.).

EPILEPSY POWDER (Rindschielder).—Dittany root, peony root, and mistletoe wood, of each 5 parts; castoreum, 1 part.

EPILEPSY POWDER (Sloet van Oldrutenborgh, Holland).—Dittany root, 8 parts; zedoary powder, 1 part; 2.5 grammes to be taken once a day in linden-flower water.—*Aldis*.

EPILEPSY POWDER (Wepler, Berlin).—Hempen threads, charred and powdered. 3 grammes, enclosed in 7 capsules, for 5s.—*Hager*.

EPILEPSY POWDERS (Wiedebach & Schlemüller, Arensdorf).—Grey powders, labelled 1, 2, and 3, agreeing with one another, and each consisting of about a teaspoonful of half-calcined bones. Rather a "sympathetic" remedy. Gratis.—*Hager*.

PEA AND MALT FLOUR (Baron Friedel, of Dahsau by Herrnstadt).—This is a food easily digestible, convenient for kitchen use, and cheap when compared with flesh. It is a bright yellow powder with an agreeable aromatic bread-like taste and smell, containing in 100 parts 28.1 legumin and albumen, 50.94 starchy bodies (starch, dextrin, mucilage, and pectiu), 2.27 fat, 8.02 cellulose, 2.55 mineral matters (ash), 8.12 water. 500 grammes, 3d.—*Dr. Franz Hulwa*.

ERVALENTA (Warton).—A mixture of the flour of French-grown red lentils and bean meal, with 3 to 6 per cent. of sugar and salt. It has recently, however, been met with of a different composition. 500 grammes, 3s. 9d.; 4 kilogrammes, 10s.

ESPRIT D'AMARANTH.—Under this name are included three freckle remedies. No. 1 has printed directions for use, signed by Apotheker Weinitschky. Analysis gives for No. 3 (which is to be used first) 1 gramme corrosive sublimate in 30 grammes impure spirit; No. 2 has 2 grammes, and No. 1 3 grammes of the sublimate. The very moderate price is 6s.—*Traftehn*.

ESPRIT DE LANNETON.—Spirit of maybugs or cockchafers. (Franz Gross, Landsberg on the Warthe.) A turbid yellowish spirituous fluid, consisting of 80 parts castille soap, 20 to 25 camphor, 400 water, 600 alcohol, 80 to 100 parts fresh maybugs. Macerate and strain. 60 grammes, 1s. 6d.—*Hager*.

ESPRIT DES CHEVEUX OR VEGETABLE HAIR BALSAM (Hutter & Co., Berlin).—Diluted mixture of coco-balsamica (Ph. G.) (Hoffman's balsam of life), coloured brownish yellow by macerating in it some cloves. 100 grammes, 3s.—*Wittstein*.

ESSENCE LEMCINE—watchmakers' oil—is made by distilling from a water-bath a mixture of 200 parts coal-tar benzoin, 10 parts lavender oil, 5 parts bergamot oil. It must be carefully protected from air and sun-light. Our watchmakers use the benzine of commerce.—*Hager*.

ESSENTIA ANTIPHTHISICA (Dr. Lobethal, Breslau).—A solution of common salt—1 in 7—with traces of iodine. 160 grammes, 5s.—*Wittstein*.

OIL ESSENCE FOR GOUTY PAINS (Eleonora and Johann Baner, living not far from Heitzing).—A bottle containing 65 grammes of a yellowish fluid, in two layers, which will not incorporate either by shaking or heat. The upper layer (about 40 grammes)

consists of sunflower seed oil; the lower of a mixture of water, squill (6 grammes), and the juice of the so-called sea onion [not squill, but the *Ornithogalum caudatum*, a species of star of Bethlehem used at the Cape of Good Hope, as squill is used with us.—Ed. C. & D.]. It is cultivated by the gardeners and sold to the public by this name.—*Hager*.

ETHER CHLORIQUE.—A mixture of 1 part chloroform with 10 parts spirits of wine.

EUCHLORIN TOILET VINEGAR OR PRESERVATIVE COSMETIC (E. Meitzen, Cologne).—A protection from contagions of all kinds. It consists of two fluids. One, labelled "Euchlorin" and kept in a bluish glass bottle, is a solution of sodium carbonate, saturated with chlorine and hypochlorous acid (Eau de Labarraque). The other, an opaque white bottle labelled "Toilet Vinegar," is simply aromatic vinegar mixed with a little benzoin tincture and filtered. 2 bottles containing 100 grammes, 3s.—*Hager*.

EUGENIE'S FAVOURITE (Mdlles T. & L. Jouvin, Paris).—A colourless fluid with 28 per cent. lead carbonate.—*Chandler*.

EUTODOME (Sonntag, Weichselmünde).—A non-poisonous field-mouse-exterminator. A mixture of rye meal, barley meal, squill, fatty oil, and red bole. 100 grammes, 1s. 6d.—*Hager*.

EXTRACT-RADIX—A TOOTHACHE REMEDY (Schott, Frankfurt-on-the-Maine).—A tincture of aconite and one-berry. 4 grammes, 1s. 3d.—*Hager*.

MEDICAL COMMENTS ON THE COUNTER PRESCRIBING CASE.

THE *Medical Press* of May 29 contained an editorial article on "Counter Prescribing and its Defenders." At that date the news of the apothecaries' victory did not seem to have reached our warm-blooded contemporary. Referring to the decision come to "at the annual meeting of the Chemists and Druggists Trades Union" (*sic*), to raise "a special fund to fight the medical profession," the *Press* says:—"This intention is quite natural, inasmuch as the trade has been making a very handsome income by assuming to do that which the law and common sense strictly forbid them to do, and which, with every respect to them, they are, as a whole, totally incompetent to do; and it is to be expected that they will not yield so profitable a part of their business without a violent struggle."

"These gentlemen express unbounded confidence that the feeling of the public and of Parliament is all in their favour. Why then do they not spare their 2,000*l.*, and, instead of attempting to sustain their alleged rights by special pleading on a legal quibble, meet the question fairly and finally, by introducing a Bill into Parliament to assert their privilege to act as medical practitioners. They well know that such a Bill would have no chance of ever getting a second reading, and they therefore feel that their whole dependence is on the possibility of lawyers differing as to the present law, and on the likelihood of their being able to protract the law proceedings, and mystify the judges until the Medical Defence Association surrenders in sheer weariness."

"From the energy of its proceedings hitherto, we may be quite sure that the Association will do nothing of the sort if it is encouraged and supported by the profession. Surely, to put the matter on the lowest ground, it ought to be worth the while of the general practitioners in England to invest a few shillings each to defend themselves against the competition of some tens of thousands of druggists throughout the country who, if established in their illegal practice, will take tens of thousands of pounds each year out of the pockets of the general medical practitioners. Surely, from a public point of view, it is worth something to protect the uneducated masses from the therapeutic eccentricities of traders whose notion of doctoring is seldom confined to the conventional and usually inoffensive purge and cough bottle."

* *

The *Medical Times and Gazette* (June 1) having briefly narrated the circumstances of this and also of "Dr." Hamilton's case, says:—"The profession cannot but feel satisfied with the result of these actions, and the prosecuting Associations may fairly be congratulated on their success in vindicating their rights as legally qualified practitioners of medicine. It is now

clear that the Apothecaries Act affords the public and the profession all the protection that is necessary, and all that is really demanded. The general body of medical practitioners do not wish to prevent chemists from giving their customers a bottle of mixture for any simple ailment, but they do object to the practices of those chemists who hold themselves out to the public to give medical and surgical advice, and who systematically prescribe for and treat disease without regard to the nature or gravity of the case."

Elsewhere, the same journal also says:—"The importance of this decision is manifest, and if it acts as a check upon the present unsatisfactory system of counter prescribing, one factor in the large ratio of infant mortality will, no doubt, have been removed."

* *

The *British Medical Journal* (June 1), after summarising the particulars of the case, says:—"It is necessary to remember how dangerous are the consequences of this kind of irregular practice, how largely it is carried on, and how utterly incomplete are the guarantees which it affords for the safety of the patient or the competence of the practitioner. Chemists are secured in large privileges by Act of Parliament, and they are bound not to exceed those limits. The fact that they have to deal largely with drugs, and are supposed to possess some knowledge of their properties, invests them in the minds of the ignorant and uneducated classes with a certain mysterious semi-medical character with which is mixed up the idea that they must know what is good for all sorts of diseases; and it is for that reason that they are bound specially not to infringe upon the privileges of the medical profession, with which they have close relations, but to which they do not belong, and of which it is dangerous that they should ape the character or assume the functions. Chemists have, however, largely assumed medical functions throughout the country; and the Medical Defence Associations started by Mr. R. H. S. Carpenter, Mr. Nelson Hardy, and Mr. G. Brown are rendering a service to the profession and the public which can hardly be over-estimated in vindicating the dormant powers of the law by prosecuting chemists who infringe it in this respect. We suggested more than once last year that the British Medical Association should organise local committees in connection with its branches for managing such prosecutions in a uniform manner; and we are still inclined to think that such local committees would be of much public and professional advantage. Systematically conducted and guided from a centre with due discretion, very few such prosecutions would then become necessary; for were the law once adequately vindicated at different parts of the country simultaneously, or nearly so, and were it well understood that a central body, having adequate local organisation, would aid by local committees to protect the public and the profession from the encroachment of these unqualified persons, the result would be that very few prosecutions would be called for. The deterrent influence of such an organisation would very soon make itself felt; and nothing could be more desirable in the interests of public health and morality. Meanwhile, we congratulate the Medical Defence Association that, with small funds and without the countenance of persons of high influence or position, they have, by independent action, vindicated the law and maintained the interests and rights of their own profession and of the public at large."

* *

The *Lancet* (June 1) considers the issue of the trial important, inasmuch as it not only emphasises and strengthens decisions in former cases that occurred in 1876 and 1877, but does so from the new aspect raised on this occasion by the defence. "It has not, as far as we know, previously occurred to the defendants to produce evidence as to what were the manners and customs of the trade prior to 1815, although medical as well as chemical education has altered and improved so much since the latter date that a comparison of "customs" then and now may not perhaps be of great value. If, however, we allow that chemists have advanced more rapidly than medical men towards a high standard of work, the principle of prescribing is not thereby one whit altered. As we remarked in effect some time ago, "pick-me-ups," soothing or purging powders, and mild sedatives can be, and always will be, prescribed by the united wisdom of client and chemist, and may be supplied by the latter without any harm resulting. But during the past two

Koppon is identical with cevadine is shown on comparing the analytical numbers:—

		Merck	Schmidt & Koppen	Wright & Luff
Calculated for $C_{12}H_{40}NO_6$		Mean of 4 combus- tions, 1 nitrogen and 4 gold determi- nations	Mean of 7 com- bustions, 3 nitrogen and 5 gold determi- nations	Mean of 4 com- bustions, 2 nitrogen and 3 gold determi- nations
C in base	61.97	61.81	64.63	64.72
H "	8.29	8.71	8.62	8.57
N "	2.37	5.50 *	2.66	2.31
An in gold salt	21.08	21.01	21.09	21.02

$$\begin{array}{rcl} \text{C}_{17}\text{H}_{15}\text{NO}_{12} & = & \text{C}_{15}\text{H}_{11}\text{NO}_{11} + \text{H}_2\text{O} \\ \text{Aconitine} & = & \text{Apononitine} \end{array}$$

Aconitine and pseudoaconitine, when treated with organic anhydrides (acetic and benzoic), lose the elements of water, and in place of hydrogen take in an acid radical.

Preparation of aconitine for medicinal and pharmaceutical purposes.—To exhaust aconite roots the alcohol used for percolating should be acidified with tartaric acid, not with sulphuric acid, as the latter acid extracts more non-crystalline bases than the former, as shown by the two following experiments:—

	Alkaloids obtained by tartaric acid	Alkaloids obtained by sulphuric acid
Crystalline bases ..	60 per cent.	20 per cent.
Non-crystalline bases ..	40 "	80 "

To obtain the aconitine in a pure condition the alkaloid should be converted into a crystalline salt (nitrate or hydrobromide), and the aconitine regenerated therefrom by agitation with carbonate of soda and ether.

NOTES FROM GREECE.

WE have been favoured with the following items from M. Xavier Landerer, of Athens:—

THE HISTORY OF PARSLEY.

Parsley was sacred to the gods of the lower world, and associated with grief and tears. The graves of the departed were bestrewn and crowned with it. When a sick person was past hope the ancients used to say, "Apio solum indiget," i.e. "He only requires parsley." A crown of parsley was originally the prize in the Isthmian games, until, in later times, this was replaced by a crown of pine leaves. The conqueror at the Nemean games was also crowned with parsley, because Opheltes, son of the King of Nemea, was killed by a serpent which lay hid under parsley.

In the Olympic games branches of laurel were given to the conqueror; and in the Olympic games, which some years since were re-introduced into Greece, we have used laurel and olive branches as the prize.

It may be further noted with regard to parsley that the practice of crowning the departed and decorating their tombs with this herb is in vogue among the country people at the present day.

[It seems risky to dispute with our correspondent on such a subject, but unless our classical learning is very much at fault it was the parsley crown which replaced that of pine leaves, not *vice versa* as he tells us.—Ed. C. & D.]

Laurus Nobilis and Laurus Apollonis.

Δάφνη, Daphne, the river goddess, according to mythologic story, fled from the embraces of Apollo, and was, for her preservation, changed by the river god Peneus into a laurel tree, which has been called Daphne ever since. This beautiful shrub, to which so many significations are attached, has been found, since the earliest Greek and Roman antiquity, in all cloister gardens, and at the height of from 2,500 feet to 2,800 feet on lofty mountains, as on Taggetus, in Sparta, on Delphi, in Euboea, and on Parnassus, in Bœotia. Its beautiful name *Laurus*, which has been esteemed a preservative against lightning, is derived from the Celtic word Lauer, or Lauer. There are few more beautiful evergreens. A crown of laurel adorned the conqueror at Delphi, for the Delphians maintained that the oldest temple of the oracle of Apollo at Delphi was built of laurel, which had been brought from the Vale of Tempe. The priests of Apollo wore crowns of laurel; the Pythian priestess chewed laurel leaves in order to obtain prophetic dreams, and then ascended the tripod in order to deliver her oracular utterances. Similarly persons who wished for prophetic dreams laid branches of laurel under their pillows. The laurel is the symbol of peace and of merit.

From the laurel berries, Δάφνιδες, *Bacce Lauri*, the fruit of this beautiful Eastern shrub, large quantities of the most exquisitely-perfumed oil (*Oleum Lauri*) might be expressed. But this is neglected, and the berries are left unused, a prey to birds.

Daphnoladon, Δάφνηλαιον (oil of bays?), is used by Eastern ladies to prevent the hair falling out. The hairs are first washed with a decoction of Eastern soapwort, in order to

remove pityriasis. Daphnoladon is also a remedy for rheumatism in the East.

[The classic Parnassus was in Phocis, not in Bœotia.—Ed. C. & D.]

ORNAMENTAL PLANTS FOR PUBLIC AND PRIVATE GARDENS.

Wild bushes and trees, suitable for the adornment of the gardens which are to be found in all large towns, and which exist by thousands in Athens and its neighbourhood, are brought to town daily in waggons from the neighbouring woods, and sold as "*Agria Dendra*," wild trees, being bought by the people. Among these "wild trees" the following beautiful varieties may be thus obtained at a low price:—Pines: *P. Cephalonica*, *P. halpensis*, *P. abies*, *P. cedrus*, *Thuja articulata*, *Juniperus Phœnicia*, with beautiful red berries; *Myrtus communis*, *Erica Mediterranea*, *E. arborea*, *Pistacia terebinthus*, *P. vera*, *P. lentiscus*, although these do not yield us either mastick or turpentine. *Passerina hirsuta*, small palms, *Phœnix dactylifer*, *Agave Americana*, *Platanus orientalis*, under which the philosophers used to teach; *Olea Europea*, *Cupressus sempervirens*, roses, *Rubus asia*, *Punica granatum*, *Pancratium maritima*. Nevertheless, the most beautiful ornamental plant is the strawberry tree, *Arbutus unedo*. This, when covered with its ripe red berries, and its unripe yellow ones, is one of the most striking and beautiful eastern bushes, and is an ornament wherever found, whether in the forest or in the garden.

IMPORTED PRODUCTS.

Many fruits are imported from Alexandria, in Egypt, which, on account of their rarity, are bought by the rich at a high price, and sold most advantageously by the merchant. For the last year or two oranges have been imported from Tunis, Beyrout, and Java. These come to Greece when our own oranges have been exhausted and consumed. In the month of May these oranges are double the size of the thick-skinned Greek oranges, and, according to their size, are sold for 20 to 30 lepta, i.e., 4 to 6 kreuzers apiece, an extraordinary price to quote in Greece, yet they were sold at the same on account of the lack of oranges.

Fresh dates, attached to the branches, imported from Alexandria, are purchased at 5 to 8 francs per okka (about 2½ lbs.). Tomatoes, the fruit of the *Solanum Lycopersicus*, enclosed in cages like birds, are, on account of their rarity, sold during January at 5 francs per okka. Cherries, during January, cost 3 francs per okka. Pistachio nuts, from Chios, 3 francs per okka. The so-called manna, *Radix Cypri esculent*, now costs 50 lepta per okka.

AN ORNAMENTAL GREEK PLANT.

Of all ornamental plants, the *Nerium oleander* is the most beautiful. It flourishes in watery districts, growing beside small rivers and brooks. The name *Nerium* is derived from *Nyphos*, which means watery, hence a plant which seeks damp situations. It is well suited for flowerpots in the drawing-rooms of English ladies, and is of additional interest as coming from classic regions.

The fruits of the *Nerium oleander* form an ornament for the table, though but few varieties are edible. The proverb, "*Unum edas quod difficilis decoctionis*," is the origin of the name "*Unedo*," by which it has been designated. The plants are dug up by means of picks, with the extremities (i.e., the sponge-like) adhering to the root fibres. Even when transplanted to the best gardens many will perish, as being removed from their natural habitat.

A MEANS OF DESTROYING EARTHWORMS.

Water the soil in which the earthworms are found which are injurious to the most common vegetables (they gnaw the roots of the plants and cause them to wither), with a strong, saturated solution of *Nerium oleander*, i.e., *Decoctum saturatum nerii oleandri*, called *Pikrodaphne* and *Rhodaphne*. The decoctions of this plant are extremely bitter, and this bitter principle seems to act mortally on these worms, called "*Skoligkes*." Greek and other Eastern gardeners, in order to free their gardens from these worms, plant the soil with artichokes, *Cynara scolymus*, and the roots of these plants must contain some bitter principle, for all these worms die, and the gardens may then be planted with other vegetables, *Solanum lycopersicus*, tomato; *S. Melongena*, egg-apple; sweet and water melons, and cucumbers. Such is the experience of the gardeners.

PARIS EXHIBITION.

SPECIAL REPORT.

WE propose this month to describe some of the exhibits in the English section, deferring for the present all notice of the contributions of other nations. Among such a vast collection of more or less isolated facts, the mind is bewildered unless vigorous efforts are made at classification and arrangement. This is not easy where diversity is so much more frequent than resemblance, and it is almost impossible so thoroughly to grasp all details as to assign to each infallibly its legitimate proportions. For these reasons we assert not that the things we notice are most noteworthy, but only that we have noticed them most closely.

VARNISHES, &c.

By various accidents the displays of varnishes were the first to attract our attention. In the British section they are exhibited by ten makers, besides three who display varnish suitable for boots only. The exhibits of Messrs. Gidney Clark & Co. (West Ham Abbey, London) and Messrs. Wilkinson, Heywood, & Clark (Battle Bridge, King's Cross, N.) are among the most striking from our special point of view. The former firm have printed an elegant little pamphlet giving much information, especially on the subject of the fossil and other resins used in the manufacture. A hundred and fifty years ago the word drug included "all kinds of simples for the use of physic and painting." Druggists of that time must have dealt in varnishes, and we learn from Pomet, a French druggist, who lived a little earlier, that six kinds of varnishes were sold. In Messrs. Gidney & Co.'s pamphlet the list of varnishes they make includes no less than 68, and there are many kinds not mentioned here. Though this immenso development has taken place, the main features of the various kinds were already discernible in Pomet's stock. There we find dry, white or Venetian, spirit, and common varnishes,—names which will at once be recognised by druggists who follow in the steps of their predecessors. Besides these Pomet mentions "golden varnish," an oil varnish containing sandarac and litharge, and coloured with gamboge and aloes. This is the ancestor of our gold lacquer and size; it was first invented by Antonio Conto, an artist, of Palermo, Sicily, who published his invention in 1680. "China varnish," made of lac, resin, mastic, and spirit, is probably an early form of our japan. Pomet also says, "There is another varnish of the religious make, but, as we do not deal in it, I shall not trouble myself or the reader about it." The old druggists left to the workmen the selection of the varnish most suitable for their purpose. Modern makers provide varnishes especially adapted for carriages, house-painting, stoves, and other articles; they study the conditions which must be observed to secure success, and, as a consequence, turn out articles which have secured and maintained a world-wide renown. Messrs. Wilkinson, Heywood & Clark exhibit a board which frequenters of these "shows" will soon recognise as an old friend. It was painted and varnished for the London Exhibition in 1862; it appeared at Paris in 1867, and now comes up fresh and almost smiling for another encounter with the juries. It has not been touched or revarnished since 1862, but, although its appearance certainly proves that the exhibitors' manufactures do not themselves contain causes of change, yet we can hardly imagine that it has been exposed to very severe atmospheric or other tests.

The most striking difference between old and modern varnishes is the use in the latter of the fossil resins, known as copals, animis, and kowries. None of the older ones contain them, hardly one of recent manufacture is without them. Messrs. Gidney, Clark & Co. exhibit a collection of these substances, believed to be the largest ever got together.

Of Kowrie, or Kauri, the product of the New Zealand tree *Dammara Australis*, three masses are shown here, which weigh together no less than 300 pounds. The largest was specially consigned to the firm about 14 years ago, and weighs more than 120 lbs. During 1877 the declared deliveries of this material from the public warehouses of London was 1,522 tons—nearly twice the amount of the total deliveries of all the sorts of copal and animi. Kowrie has also been called Australian dammar resin, and kauri copal. It consists solely of a crystallisable acid resin, dammaric acid, and a neutral resin dammaran. It is one of the easiest materials to convert into varnish, which accounts for its large consumption. But in durability it is surpassed both by animi and Sierra Leone copal. The latter of these is washed by the rains down the

mountain slopes of the West Coast of Africa, and is shipped from the port whence it takes its name. The tree which produces it is not certainly known. Messrs. Gidney, Clark & Co. maintain that this resin properly manipulated should be the foundation of all varnishes, and ascribe to its use (which is confined to a few manufacturers) the superiority that "English varnish" maintains all over the world. Animi is another African product, a true fossil—shipped from the Island of Zanzibar, on the East Coast of Africa. It is supposed to be the product of the *Trachylobium Mosambicense*, but it is doubtful if this tree now produces any of the resin. It is more probable that like amber it is product of a tree which has become quite extinct. Several other varieties of copal are exhibited here, such as Benguela, Angola, Accra, Lisbon, and Manila copals. The true origin is known of none of them, and all but the last are African products. They are very little used in England.

Messrs. Jenson & Nicholson exhibit these gums both rough and polished, and the cases of Messrs. John Mackay & Co., Canning Street, Edinburgh, and Messrs. Wilkinson, Heywood & Clark, also contain specimens of the materials from which their varnishes are made. The latter firm also exhibits jappanners' paste or *Maroufle*. This is a hydrated oxide of iron intended to replace Chinese and Prussian blues in the manufacture of black varnish used by jappanners in making patent leather, American cloth, &c. It is the invention of the firm, and compares very favourably in price with the materials it replaces, costing only pence where they cost shillings.

The exhibit of Sir William A. Rose & Co., of Upper Thames Street, E.C., contains an article which will excite the curiosity of pharmacists. This is Sir W. A. Rose's Infusible Railway Grease. It is claimed for this that at every temperature to which it is likely to be exposed it retains the same consistence. It is used in Egypt, Australia, and India, as well as in Great Britain, and effects a saving of 25 to 50 per cent. in the amount of lubricant used. Even in the Arctic regions its consistence is said to be but little harder than when it is in the axle-box of an express train in India.

The Oakbank Oil Company, of 128 Ingram Street, Glasgow, exhibit a fine series of products of shale distillation. The "cylinder" oil is especially adapted for internal lubrication of high-pressure machinery. Being a hydrocarbon, the superheated steam which would split animal or vegetable oils into glycerine and fatty acids, is unable to decompose it.

SOAPS AND WASHING MATERIALS.

The man who invented soap is one of the benefactors of his kind whose name is lost in the mists of antiquity. In Pliny's time the Gauls and the Germans made a soap of tallow and the ashes of the beech tree, which was used in Rome not for cleansing, but to dye the hair a red or tawny colour. Fullers' and other kinds of earth, the roots and juices of certain plants, the meal of various seeds, and occasionally oxgall were used for the purposes for which we now use soap. No great stride seems to have been made in this manufacture during the last few years. Still we have here several remarkable displays of soaps or materials destined to replace them.

Messrs. Henry Glover, Son & Co., of Bradford, Yorkshire, exhibit dry soap, soap extract, and washing powders. The dry soap is sold at 26s. per cwt. (discount 2½ to 10 per cent.), and in composition is about equal to good Castille. That is to say, it contains 75 per cent. of fatty matter, while Castille soap contains 72 to 78 per cent., with 8 to 9 per cent. soda and 15 to 16 per cent. water. Ordinary hard soap contains 20 to 30 per cent. water and 70 to 60 per cent. of fatty acids. The term "dry" soap is therefore only used comparatively. Messrs. Glover & Co. commenced business in 1847, and claim to be the first makers of dry soap, although we are not told that they commenced this manufacture and their business at the same time. This is rather an interesting point, as Messrs. S. Hemingway & Co., of Trafalgar Street, Bradford, also claim the invention, and with greater definiteness state that dry soap was unknown until invented and introduced by them in 1867. Both firms claim that their manufactures are the best in the market—the latter partly on the ground that their soap is made not from fat and tallow but from oil. The soap extract and washing powders of Messrs. Glover & Sons are said to contain "a great amount of palm oil soap . . . and a large quantity of the finest non-caustic alkali." . . . It may not be generally known that some of the violet soap occasionally sold is made with palm oil, and that it owes its perfume and name

to this ingredient. This firm also claims an advantage in economy in the cost of labels, handbills, and show cards. They are not only soap makers, but also paper merchants and steam printers, so that it is clear that if so disposed they may give the retailers the advantage of several intermediate profits.

Messrs. Hodgson & Simpson, of Calder Soap Works, Wakefield, show "Glycerine Toilet Soap for the Million" in penny tablets, five to the pound. They also exhibit a novelty in soda crystals, made directly from black ash or ball soda. The plan usually adopted is to lixiviate the black ash (the product of heating together sodium sulphate, calcium carbonate, and carbon) and to evaporate the liquid to dryness, which yields soda ash. This is ignited with carbon to convert any sodium hydrate present into carbonate, and it is then dissolved and crystallised. As we understand Messrs. Hodgson & Simpson's process, it consists in evaporating to crystallisation the clear liquid obtained by treating the black ash with water (thus saving the cost of evaporating the solution to dryness), igniting, and redissolving. We have been furnished with no analysis, so that we cannot give an opinion on the greater purity claimed for this article over that usually made. Black ash contains on an average nearly 4 per cent. of sodium chloride and 7 per cent. of sodium sulphate, with 65 to 69 per cent. of sodium carbonate. Soda crystals made in the usual way contain about 36 per cent. of sodium carbonate, 1 per cent. of sulphate, $\frac{1}{2}$ per cent. of chloride, and 62 per cent. of water. From the composition of black ash we should be led to expect that soda crystals made from it would contain a larger proportion of the sulphate and chloride than when made from the soda ash. We are informed that Messrs. Hodgson & Simpson use all the soda crystals they manufacture in soap making.

Messrs. Harper Twelvetees & Son, of Cordova Works, London, E., exhibit an article called the Australian Wool Scourer. The scouring of wool seems to be practised at present solely by rule-of-thumb, its object, of course, being to remove the natural grease adherent to the wool. We imagine that the present article is a alkaline compound, for in the directions for use we are told that "as a rule there is sufficient grease in the wool to make a strong lather." Samples are distributed gratis by their agent. The same firm exhibit Glycerine Soap Powder, so named not because it contains glycerine but to indicate its softening and emollient properties: this was named so long ago as 1855.

CAN AN UNREGISTERED CHEMIST SUE FOR THE VALUE OF GOODS DELIVERED?

AT the Liverpool County Court, on May 13, before Mr. J. F. Collier, judge, an action was heard in which James Taylor, described as a chemist, carrying on business in Smith Street, Kirkdale, sued Dr. E. Hughes, Church Road, Walton, for 1*l.* 17*s.* 11*d.*, the amount of a bill for drugs sold to the defendant. The plaintiff, in reply to questions by the judge, said the drugs were sold by his manager, by whom the business was conducted. The defendant disputed the right of the plaintiff to sue, on the ground that he was not a registered chemist as required by the Pharmacy Act of 1868. That Act declared it to be unlawful for any person to sell or keep open shop for retailing, dispensing, or compounding poisons, or to assume or use the title chemist and druggist, or chemist or druggist or pharmacist, or dispensing chemist or druggist, in any part of Great Britain, unless he was a pharmaceutical chemist, or a chemist and druggist within the meaning of the Act, and registered under the Act and conformed to such regulations as to the keeping, dispensing, and selling of such poisons as might from time to time be prescribed by the Pharmaceutical Society, with the consent of the Privy Council. In reply to further question from the judge, the plaintiff said he was not registered himself, but his manager was registered. The shop was his own, and the money would be his own if he got it. His Honour: How is it you carry on the business by a manager? Plaintiff: It was my son's shop, and he died. I have taken out letters of administration, but they are at home. The defendant urged that the plaintiff as trustee could not continue the business longer than for a reasonable period required for the administration of the estate. In answer to this objection the plaintiff said although he settled the accounts of the estate four years since, he continued the employment of the same manager, who was still paid out of the estate. His son (Thomas

Taylor) died in 1871, and the name of William Floyd, the manager, was over the door. The defendant said he had never received any bill from the plaintiff, and he bought the goods, as he understood, from William Floyd. He objected on legal grounds to pay the plaintiff. His Honour said he would adjourn the case for the production of the letters of administration, and for proof of the delivery of the goods. At present he did not see anything in the Act to prevent the plaintiff from suing, though possibly he might be proceeded against for the recovery of the penalty for carrying on the business, if he had done so, not being a registered chemist, after the administration of the estate. The case was then adjourned till May 21, when the judge decided in favour of the defendant.

THE CHEMICAL SOCIETY.

(Thursday, May 16.)

DR. GLADSTONE, President, in the chair.

The following papers were read:—

"On the Detection and Estimation of Free Mineral Acids in various Commercial Products," by Peter Spence and A. Esilmann. The method is based on the fact that peracetate of iron, even in dilute solutions, has a distinct yellow colour not perceptibly altered by acetic acid or solutions of persulphates, but instantly bleached by free sulphuric, hydrochloric, and nitric acids. The solution is made by dissolving 10 parts of iron alum and 8 parts of crystallised acetate of soda in 1,000 parts 8 per cent. solution of acetic acid (25 per cent.).

The "Action of Hypochlorites on Urea," by H. G. Fenton. The author has found that when urea is acted on by a hypochlorite in the cold, in the presence of a caustic alkali, only half the nitrogen is evolved. From various experiments it was proved that the nitrogen remains behind as a cyanate.

"On the Behaviour of Metallic Solutions with Filter Paper, and on the Detection of Cadmium," by T. Bayley. The author has investigated the action which takes place when drops of metallic solutions are placed on filter paper, the extent to which the solutions spread being tested by sulphuretted hydrogen. In some cases the solution seemed to concentrate itself in the middle, in others round the edge of the spot. Dilution, temperature, and the kind of filter paper have an important influence on this phenomenon. The salts of silver, lead, &c., when moderately concentrated, give a wide water-ring containing no metal, while the salts of copper, nickel, cobalt, and especially cadmium, must be much more dilute to present the same appearance. This property of cadmium to spread itself over the whole drop is so marked that it affords an elegant means of detecting it in the presence of metals whose sulphides are black.

"On Essential Oil of Sage," by S. Siguira and M. M. P. Muir. The oil consists mainly of two terpenes—one boiling at 152–156°, the other at 162–167°—an oxidised liquid, and a camphor. A small quantity of absolutely pure sage oil has been examined, and consists mainly of a terpene boiling at 264–270°, of a dark emerald-green colour.

"On the Action of Bromine upon Sulphur," by J. B. Hannay. The author has investigated the evidence as to the existence of any compounds of these two elements by boiling-points, the spectrum of the vapour, specific gravity, and vapour tension. He concludes that the action of any quantity of bromine on any quantity of sulphur is an action on the whole mass, and not in multiple proportion, but that, if at low temperatures the compound containing one atom of sulphur to two of bromine meets a body with which it can form a molecular combination—e.g. arsenic—it assumes the crystalline form in conjunction with such a body.

"On the Determination of High Boiling-points," by T. Carnelly and W. C. Williams. The authors have determined the boiling-points of various substances by observing whether or not certain salts fuse when exposed to the vapours of the boiling substance. The melting-points of the salts have been determined by Carnelly. The salts are contained in capillary tubes.

"On High Melting-points," part IV., by T. Carnelly, D.Sc. The author has perfected his (specific heat) method of determining melting-points, and eliminated two sources of error. In the present paper he gives the melting-points of over one hundred substances. He promises a paper embodying theoretical results deduced from the above observations. The Society then adjourned to June 6.

Thursday, June 6, 1878.

GLADSTONE, President, in the chair.

The following papers were read:—

"Analogies between the Action of the Copper-Zinc Couple and of the Alkaloids," by Dr. Gladstone and Mr. Russell. The authors have observed that finely-divided copper, when exposed to hydrogen, converts nitro into potassium nitrite and ammonia, and reduces potassium chlorate to chloride. The copper-zinc couple converts nitrobenzol in aqueous solution into aniline, a reaction which the authors have utilised for the detection of small quantities of nitrobenzol. The action of sodium-hydrogen, platinum-hydrogen, and carbon-hydrogen on various substances has been investigated and compared with the action of the copper-zinc couple.

During the reading of the paper, Dr. Russell took the chair.

"On the Alkaloids of the Aconites, Part III.," by Dr. Wright and A. P. Luff. The authors have continued their researches on these alkaloids, and in the present paper investigate the saponification, &c., of aconitine and picroaconitine, and have obtained two new bases, aconine and picroaconine; acetyl and benzoyl derivatives of several of the bases have been formed. The authors draw an important practical conclusion from their work: that it is quite possible to obtain crystallised alkaloids of constant composition from *A. ferox* and *A. napellus*, instead of the amorphous preparations which are now sold, and which often contain 40, and even 90 per cent. of bases more or less pure.

"On the Alkaloids of the Veratrinums, Part I.; Alkaloids of Veratrum Sabadilla," by Dr. Wright and Mr. Luff. After discussing the conflicting statements which have been made by previous observers, the authors give details of the process of extraction, which consisted in percolating the crushed seeds with alcoholic tartaric acid, evaporation and extraction by numerous and prolonged shakings with ether. Three alkaloids were obtained: veratrine ($C_{37}H_{53}NO_{11}$), which on saponification splits up into veratric acid and a new base, verin; cevadine ($C_{22}H_{29}NO_9$), splitting up on saponification into cevadic acid (ethylecrotonic acid) and cevin; cevadilline ($C_{34}H_{53}NO_9$), which does not crystallise or form crystalline salts.

"On the Action of Hydrochloric Acid upon Chemical Compounds," by J. W. Thomas. The author has examined the action, in several ways, of hydrochloric acid on many salts—nitrates, phosphates, tartrates, citrates, chromates, oxabates, &c.

"On the Action of Oxides, Part I.," by Dr. Mills and Mr. Russell. The object of the authors was to determine the law of consequence of which the action of oxides on salts leads in general to the formation of other oxides derived from the salts in question. They have studied the action of tungstic, silicic, and titanous oxides on potassic carbonate at a high temperature. "On a New Test for Glycerin," by Dr. Senior and Mr. Lowe. This test is founded on an observation of Lies, that borax when heated with glycerin gives to a Bunsen flame the green colour characteristic of boracic acid. By means of the test one-tenth per cent. of glycerin was detected in beer after concentration, &c.

"On Ammonium Triiodide," by G. S. Johnson. The author has prepared this substance by dissolving iodine to saturation in a strong aqueous solution of ammonium iodide, and by stirring crystals of ammonium iodide and iodine with a small quantity of water till the resulting black liquid refused to dissolve more of either ingredient. The liquid on evaporation over sulphuric acid gave dark blue prisms of the substance in question, slightly iridescent, sp. gr. 3.749.

The Society adjourned to June 20.

CHEMISTS' ASSISTANTS' ASSOCIATION.

Wednesday, May 22, the first scientific meeting of the London session of the above Society was held at 29 Brewer's Lane, when Mr. A. Saunders read a paper on "Water Analysis." The author suggested that this subject might prove in the future a source of additional income to the pharmacist, and in order to excite the interest of his hearers rehearsed the chief points in connection with the manipulation of tests, and with the general estimation of the purity of samples of water. The discussion which followed was long and animated. After a vote of thanks had been passed to Mr. Saunders, several dis-

persing queries were put and answered by various members. The meeting then dispersed.

On Wednesday, June 5th, Mr. Wallis, president, in the chair, a paper on "Internal Parasites" was read by Mr. Smart, of the Quekett Microscopical Society. There was a large attendance of members, and the paper, which was of a most interesting nature, and was illustrated by numerous specimens and diagrams, was warmly applauded.* A vote of thanks was heartily accorded to Mr. Smart, who replied shortly, and the members proceeded to examine the microscopic slides illustrative of the subject of the paper, which were explained in detail. The next meeting was announced for July 3.



THE LEGALITY OF COUNTER PRACTICE.

THE SOCIETY OF APOTHECARIES v. WIGGINS.

In the Queen's Bench Division, Westminster, on May 23 and 24, at the sittings at *Nisi prius*, before Mr. Justice Field and a common jury, an action was brought by the plaintiffs, described as the Master, Wardens, and Society of the Art and Mystery of Apothecaries of the City of London, to recover penalties from the defendant, Henry Wiggins, a chemist and druggist, of 236 Blue Anchor Road, Bermondsey, on the ground of his having, in the years 1876 and 1877, at divers times, acted and practised as an apothecary, in contravention of the Apothecaries' Act, 55 Geo. III. c. 94. The plaintiffs relied on four cases of children whom the defendant treated, and for whom he made up medicine, for each of which, if the offence were proved, he was liable to a penalty of 20*l.*, but in reality they only sought to recover one penalty.

The defendant by his pleadings denied the allegations in the plaintiffs' claim, and further averred that if he did give advice and supply medicine, he did not do so as an apothecary within the meaning of the Act, but in the exercise of his trade and business as a chemist and druggist, as it was carried on before the passing of the 55th Geo. III. c. 94, prior to which persons carrying on his trade were permitted to compound and supply medicines for simple complaints.

Mr. Morgan Howard, Q.C., and Mr. Gore were counsel for the plaintiffs. Mr. McIntyre, Q.C., and Mr. Clement Higgins represented the defendant.

Mr. Howard, on opening the case for the plaintiffs, said it was one of considerable importance, not only as regarded the Society which he represented, and the defendant himself, but the public at large. The action was brought to recover penalties under the statute of Geo. III., known as the Apothecaries Act, and it would be proved that the defendant had, in four instances at least, infringed that Act by giving advice to and compounding medicines for children who were suffering from serious ailments. Two of these children were taken by their parents to the shop of the defendant, and he asked what they were suffering from, and then pronounced what was the nature of the disease. One, he said, was a case of diarrhoea, and the defendant selected and made up the medicine which he thought proper, and sold it, and some time after it had been administered the child died. In the second instance the defendant pronounced the disease to be scarlet fever; he treated the child, and the medicine he supplied was repeated five or six times, and that child also died. Another case was that of a child who was too ill to be taken to the defendant's shop, but the mother called, and he asked her questions such as should only be put by a medical man of long experience and practice in his profession. He pronounced the child to be suffering from wheezing of the chest, and supplied it with medicine, and that

* We have Mr. Smart's very interesting paper in type, and hope to publish it in our next.—ED. C. & D.

child died of a well-known disease—pneumonia. In another case a child was taken to the defendant's shop, and he said it was suffering from bronchitis. He advised for it, but the child got worse, and seeing that it was in a critical state, the defendant advised that it should be taken to a properly-qualified medical man, which was done; but that child afterwards died. Now it was not suggested that these deaths absolutely resulted from the mode of treatment adopted by the defendant, but from these four cases the jury would recognise the importance of that legislation which did not permit persons not qualified by medical education and experience to treat the public for complaints with which they were not competent to deal, and which should be guarded against as dangerous. The defendant said he was entitled to act as he had, for before the passing of the Act all chemists and druggists were permitted to treat simple ailments. He understood some venerable persons would be called on the other side to prove the existence of the custom prior to the passing of the statute; but even so, that would be no defence to the action, for the jury would not, he felt assured, find that such diseases as pneumonia and scarlet fever came within the category of "simple ailments." Chemists and druggists had no reason to complain of being hardly dealt by. They were well taken care of by legislation, for by the Pharmacy Act a properly-qualified man was precluded from following the business of a chemist and druggist. There was not the smallest objection to chemists and druggists preparing, compounding, and selling drugs, but they should not step over the line and judge of the nature of diseases in particular cases, and administer remedies according to their own fancy. Chemists and druggists must be registered under the Pharmacy Act, but they were subjected to no examination either in the theory or practice of medicine, or surgery, or midwifery, nor were they entitled to practise any branch of medicine, or surgery, or midwifery. The present proceedings were brought in the only form in which they could be brought, namely, as an action to recover penalties under the Act; and when the jury had heard the evidence which would be adduced he had no doubt that the defendant had contravened the statute, in which case the plaintiffs would be entitled to their verdict.

The following evidence was then adduced in support of the plaintiffs' case:—

Elizabeth Culverwell was the first witness examined. She deposed that she lived in Bermondsey, and in 1876 she had a child, within one week of being two years old, suffering from a slight cold. She went to Mr. Wiggins and told him that the child was suffering from a slight cold, and had a wheezing at the chest and was very thick at the chest. Mr. Wiggins told her to keep the child in, and said that if the wheezing continued there would be no danger. She got some medicine from his assistant, and she saw the assistant prepare the medicine, for which she paid sevenpence. The child took the medicine, and she went to Mr. Wiggins again and she got more medicine. She heard Mr. Wiggins give directions to his assistant with regard to the medicine. The child got three or four bottles of medicine altogether, and she paid for the medicine on each occasion. The child, a female, died; she could not tell what the child died of.

Cross-examined by Mr. McIntyre: She took the advice of another medical gentleman, Dr. Cooper. From the time that Dr. Cooper attended the child Mr. Wiggins had nothing to do with it.

Fanny Grist deposed that she took a child to the shop of Mr. Wiggins in July, 1877, the child being ill. She asked for a little medicine for the child, and Mr. Wiggins said he would give it to her. The child had convulsions when she was five months old. Mr. Wiggins examined the child, and gave her some medicine, which he made up himself, and gave directions as to how it was to be taken. There was a powder and a mixture. She paid him sixpence or ninepence. She took the child to the shop of Mr. Wiggins. The child died. She called in Dr. Reid, but the child died just as he came in, and he said he could not give her a certificate. Mr. Wiggins said when first he saw the child that probably it suffered from convulsions.

Cross-examined: When Mr. Wiggins saw the child he examined her tongue. He asked if the child had diarrhoea, and she said it had not. The child died in a fit of convulsions. There was only one fit.

Rosina Bennett said she lived in Bermondsey, and took a sick child four years old to Mr. Wiggins, who looked at her. He did not ask her how long the child had been unwell. He said

the child had bronchitis. He looked at the child's throat. He made up some medicine and gave it to her, and she paid him for it. There was a bottle and a powder. He told her the child was to have a dose three times a day. She gave the medicine to the child, and thought it was getting worse. She did not go to Mr. Wiggins again; she went to Dr. Cooper. The child died.

Cross-examined: Mr. Wiggins told her to take care of the child, and said that its recovery would depend as much upon the nurse as upon the doctor. Mr. Wiggins saw her child on a former occasion, when she had jaundice, and he then cured her.

Caroline Leggett deposed that Elizabeth Loades was her grandchild, and she went to Mr. Wiggins about her in March, and saw him. She told him that the child had a violent cold and he said that he would give her a little medicine. He gave her a bottle with a label giving directions as to how the medicine was to be taken, and she paid him sevenpence for it. This was two years ago last March.

Cross-examined: She had been spoken to by a gentleman about the matter, and she believed he was a solicitor.

Elizabeth Loades deposed that she went to Mr. Wiggins with her child and told him that the child had had a restless night, but that she was not quite so feverish as she had been. He told her that the child had scarlet fever. She thought she got some medicine from him, but she was not certain. She only saw Mr. Wiggins once. She called in Dr. Cooper to see the child. The child died. She did not take the child to Mr. Wiggins. Before Mr. Wiggins told her what the child was suffering from he looked at a long book.

Cross-examined: The child had only been ill a short time when she went to Mr. Wiggins.

George Joseph Cooper, a medical practitioner, deposed that he examined one of the children in an advanced state of bronchitis, and he told the mother it would die. The child had been suffering from acute bronchitis several days. He examined another of the children in an advanced stage of pneumonia, which is a dangerous disease. He called to see a third child, which had scarlatina in a very severe form. From the state of the throat he concluded that the child must have been ill several days.

Cross-examined: He was a member of the College of Surgeons and also of the Society of Apothecaries. He had given information as to these three cases to the late Dr. Reed, who was, he believed, secretary of the Medical Defence Association.

This concluded the evidence for the prosecution.

Mr. McIntyre, Q.C., for the defence, proceeded to contend that the case against the defendant could not be sustained, as there was a want of definiteness in the charges laid against him, and he wanted to know what was the precise state of the law in the matter.

His Lordship said that as the case now stood there was no prescription proved. Mr. Wiggins only said the child was suffering from so-and-so, and gave medicines. At present he (the Judge) did not know what the term "an apothecary" meant, or what "a surgeon" meant, and he must look to see what light the Act threw upon the matter. No one had asked what title the defendant had over his door. The charter had its origin in those days when trades and professions were carried on in a manner far different to what they were at present. The term "apothecary" comes from the Greek, and means a deposit. Now what was an apothecary?

After some legal argument his Lordship said that he would not stop the case; but at the conclusion he would give the defendant the benefit of any doubt that might arise. His Lordship then read the definition of the term "apothecary" as given in the dictionary.

Mr. McIntyre then addressed the jury for the defence, and observed that before they could make his client liable for a penalty they must be fully satisfied that he had infringed the Act of Parliament, and they must not strain the law against him. It was charged that his client had acted and practised as an apothecary; but he contended that in fact and in law he had done nothing which he was not fully entitled to do. Men in the position of the defendant were of great use to the public, and in an especial manner were they of use to persons who were unable to pay a fee to a doctor; and the jury must be thoroughly satisfied that he had infringed the law, before they found a verdict against him. The defendant had not infringed the law; he had a right to mix, dispense, and vend, and surely he was expected to use some discretion as to what he would give. If a person went to buy Morrison's pills, would it not be right that the person who sold the pills should ask him what was his com-

plaint, so that he might know whether he would give him pill No. 1 or pill No. 2? Under the 28th section of the Act, he would have a body of evidence to lay before the jury, from gentlemen in the position of the defendant, and who would prove that it had been usual for persons to come to them, state what their complaints were, and then medicines were supplied to them.

His Lordship said that before that evidence was entered upon he would have to be satisfied that it strictly applied to the case.

Mr. McIntyre observed that this was merely a test case, which required the greatest care, as a verdict against the defendant would seriously affect the interests of a large body of respectable men.

The further hearing of the case was then adjourned until next day.

Second Day.—Friday.

The jury having taken their places in the box,

Mr. McIntyre, Q.C., resuming his speech for the defence, said he should now have to draw their attention to the 28th section of the Act of Parliament, but would first allude to the distinction between the two questions which, so far as he understood, would probably be put to them.

Mr. Justice Field said he should first of all have to ask the jury whether in the case under their consideration the defendant had acted as an apothecary, and then he might ask them whether he had acted according to custom; but perhaps he had better leave the latter part of the case until evidence was tendered, because, upon his consideration of the 28th section, it might be that there would be no use in listening to any evidence.

Mr. Morgan Howard, Q.C., said in regard to that he was about to submit a proposition, which he should now reserve.

Mr. McIntyre, continuing his address to the jury, said his Lordship would ask them whether in this case the defendant acted as an apothecary; but he would submit that acting as an apothecary meant more than doing some things that an apothecary did. An offence would, he considered, exist if a man, not acting and holding himself out as a chemist, did what a chemist would do as well as an apothecary. They must find, if against the defendant, that he did what an apothecary only did, and not what an apothecary could do; and unless the case of the plaintiffs was made out to their satisfaction they must come to the conclusion that what the defendant did he was doing as a chemist and not as an apothecary. A man would act as an apothecary by holding himself out to the world as an apothecary only. If he did that he was within the Act of Parliament; but on the other hand, though he would undertake to make up medicines according to physicians' prescriptions, it was quite clear that a chemist would do the same thing. What he should submit was that, in order to bring him within the penalty clause for acting and practising as an apothecary, they must find that he did the whole of the things an apothecary was entitled to do, and things that a chemist was not entitled to do. The way he should put it was thus: It was part of a chemist's business to mix medicines and make up prescriptions prescribed by medical men.

His Lordship: At present the practice is that the doctor gives you the prescription, and the chemist makes it up. Between the time of the Charter of James and 1815 I have no doubt that the apothecaries had acquired a right of visiting patients, prescribing, and everything else.

Mr. McIntyre put it that they were acquiring this right at the time of the Charter of James, and adopting the practice of seeing their patients out-of-doors, and the practice was growing up then by which the body of chemists and druggists came into play as the persons who dispensed medicines in their shops, either according to the prescriptions of physicians or of apothecaries who did not dispense.

His Lordship: The apothecary not only visited the patient, but the patient visited him.

Mr. McIntyre: And according to my case he dispensed his own medicine. That is so now to some extent.

His Lordship: You find most of them dispense as well.

Mr. McIntyre: They dispense their own medicines, but to a great extent they have departed from the practice of dispensing the medicines of physicians and surgeons.

His Lordship: I am not aware they ever do it.

Mr. McIntyre: The fifth section compels them to do it. Previous to 1815 this body of chemists and druggists had come into existence, to whom the prescriptions of physicians and surgeons were taken; and they either handed the medicines

over the counter or sent them to the houses of the patients. Before that date the farther practice had grown up that persons went to the shop of a chemist and druggist, stated the nature of their complaints, and received remedies for them from the chemist across the counter.

His Lordship: That is the practice this action is intended to strangle.

Mr. McIntyre: They seek to strike off that which they call "counter prescribing," which is a well-known term, and which was a well-known term amongst chemists and druggists in existence before 1815; and what I shall submit is that the present case is one of such counter prescribing. My client has in this case been doing what was done previous to 1815, and it has been the custom of a chemist to ask a person his symptoms, and then give him the medicine, and charge for it.

His Lordship: I have done it myself. There is a very highly respectable chemist opposite the Temple—Mr. Pedler—and I have gone to him many and many a time, and having said, "I am not very well this morning," he has given me a remedy. He is, no doubt, an apothecary—at least I think so.

Mr. McIntyre: He will be here to-day, and will tell you that he is not.

His Lordship, after some conversation regarding old cases, said the present case raised a very important point, and it was a very proper one in which to have the law properly asserted. The College of Apothecaries were quite right in wishing to have the thing settled, though at the same time Mr. Wiggins was not to be blamed for doing what has been done by other respectable people in his own business. Whether the law was hard or unjust or not, it was not for him or the jury to say: they had to consider whether upon the facts the case came within the statute.

Mr. McIntyre said, for the purposes of this case, he should assume the facts as proved, and should confine his evidence to the custom which existed previous to 1815. There were two points the jury must find proved before they found a verdict for the plaintiff. They must be satisfied that the defendant in doing what he did do was acting and practising as an apothecary, and had held himself out as a person acting and practising in the way apothecaries acted, and not in a way that chemists were entitled to practise. The distinction drawn by his friend, so far as he understood it, was that if a man merely made up the prescriptions sent to him in writing by a properly qualified practitioner, he is not within the scope of the Act; but, technically, according to the provisions of the Act of Parliament, that would be acting as an apothecary, because he does what an apothecary does, namely, make up these prescriptions. But then his friend said the defendant had done something more—he had used his own brains for the purpose of ascertaining what was the proper thing to do and what was proper to be given to the patient. That, it was contended, he had no right to do, inasmuch as he was then trenching upon the province of the apothecary, and was acting and practising as an apothecary. He should submit, however, that that was not so. When a man went into a chemist's shop and asked for medicine, he must do one of two things. He must tell the chemist what quantity of a particular medicine he requires, or he must leave it to the chemist. Was the chemist, in a case where a man did not know what quantity he should take of a particular medicine, to allow him to go without telling him whether it was to be taken in one draught or several draughts, or was he to put the medicine in a properly divided and labelled bottle? What he submitted was that if the chemist was permitted to do that—and so far the custom supported the case of the present defendant—or if a chemist was allowed to do that, was he not to be allowed to recommend to a person what was best for his purpose? So far he thought the jury would be of opinion that this trenching upon the apothecary's province, because he was entitled to supply medicine and was entitled to dispense medicine; and if he was entitled to do that, was he not also entitled to say from what particular bottle he should take the medicine he was going to give to his customer? The customer himself did not know. He did not know what was good for the purpose. If he asked for an effervescing draught the chemist would supply him, using those ingredients he considered best. At present the jury have four cases before them—two in which the chemist did see the children, and two in which he did not. In the cases in which he did not see the children the symptoms were described to him, and he supplied the proper medicines, or what he considered the proper medicines, either from one bottle or several. In one of the other two cases he looked

into the child's throat, and then prescribed for it; in the other case he looked at the child's tongue, felt its pulse, and then gave the proper medicine. If that, in their opinion, came under the construction of the law, and made him acting as an apothecary, he must confess he would be rather surprised after they had heard the evidence. It did seem to him that there could be no offence at all in telling a person what to do, and giving them medicine capable of doing them good, and that a chemist doing so could not be considered as acting as an apothecary as defined by the section. A second point arose under section 28 of the Act, which provided "That nothing contained in that Act should prejudice in any way the trade or business of a chemist or druggist in preparing, compounding, dispensing, or vending medicines or medicinal compounds by wholesale or retail, and that all persons exercising the said trade or who might thereafter exercise it must exercise it in such manner as the trade or business was carried on previous to the passing of the Act." The question was not whether, rightly or wrongly, before 1815 chemists and druggists exercised the practice of making and compounding medicines—which clearly was not disputed—but whether they were in the habit of advising persons what medicines they should take, and were in the habit of supplying such medicines over the counter. 1815 was a long while ago, but several of the gentlemen he should call before them could very well recollect that year, and tell them what was the practice previous to that date—a practice which in their case must have been a very healthy one, to enable them to appear before them at the present time in a green old age. In addition, he should call before them a gentleman—Mr. Pedler—who would tell them it had always, during his recollection up to the present time, been the practice of chemists and druggists to carry on their business in this way. If he showed that for a long series of years that had been the practice, and had not been interfered with, they would find the presumption of law to be that it existed before 1815, because supposing the Apothecaries' Company were to lie by until a hundred years had passed, and then sought to stop any practice of this sort by saying, "You must call someone able to speak of the state of things previous to 1815," it would be quite impossible to produce direct testimony to controvert the company's contention. In the present case, however, he should be able to show that the practice had existed from before 1815 up to the present time. The learned counsel concluded by calling

Mr. Francis Cupiss as his first witness. Mr. Cupiss said, in answer to Mr. Higgins, that he resided at Diss, in Norfolk, and completed his 80th year in April last. In the year 1814 he was apprenticed for four years to Mr. Woolrych, a chemist and druggist at Uttoxeter, and afterwards went as an assistant to Mr. Woolrych's son at Lichfield. In 1820 he attended the Veterinary College in London, and in 1823 he went to Diss, where he carried on business up to 1874. He was acquainted with the practice known as counter dispensing. That was carried on by chemists and druggists now, and it was carried on when he first became acquainted with the business.

Mr. Morgan Howard: The answer tends to show that he is speaking of a time subsequent to the Act of 1815. I submit that no evidence as to that is receivable.

His Lordship: Section 28 says: "All persons using the said trade or business before the passing of the Act." He cannot go into the state of things subsequently.

Mr. McIntyre: What he says is that he knows the practice before and since.

His Lordship: I presume you want to know how the trade was carried on before the passing of the Act?

Mr. McIntyre: Supposing the action were being brought 50 years hence, no witness could be called to show what had been the practice before 1815, because there would be no living person able to do so, but it would be evidence as to what was the practice before that time if, going as far back as human memory could do, you found that a certain practice had existed.

His Lordship: In any lawful matter that may be so.

Mr. McIntyre submitted that before the Act of 1815, when the Apothecaries Act, passed there was no prohibition as regards chemists and druggists, and that the Act left them in respect to the dispensing and vending of medicines exactly as it found them.

His Lordship: We will assume that. Perhaps you had better ask the witness as to the practice before that time.

Mr. McIntyre (to witness): Do you know whether what is called counter dispensing existed before 1815?

Witness: I do.

Mr. Morgan Howard objected to this line of examination.

Mr. McIntyre: I was going to ask what the practice was.

His Lordship: Without it we cannot tell what counter dispensing was.

Mr. McIntyre (to witness): In what did the practice consist?

Mr. Morgan Howard objected to the question as extra to the issue raised.

The examination, however, was allowed to proceed, and in answer to further questions by Mr. Higgins, witness proceeded as follows:—Before 1815 we dispensed medicine when we were asked. The practice was to dispense medicine which we used to recommend to persons who asked us for advice as to what medicine they should take, which medicine we ourselves prescribed. If a customer came into the shop and said he had some complaint, we asked him a few questions in order to ascertain what was the matter with him. We should examine the tongue or feel the pulse if necessary, and then make up the medicine according to the best of our ability and skill. We always gave directions as to the way in which the medicine was to be taken. In giving a customer medicines we should not merely give him those already prepared—we should compound them. Sometimes the customer paid us at once; sometimes we sent a bill. We never charged for professional advice; we used to say the price of the medicine was so much, and charged them the price. We should make no difference in the price between the medicine prepared according to a physician's prescription and that supplied upon our own advice. That practice continued from 1814 down to 1874, when I retired from business.

Mr. Morgan Howard objected to any evidence except as to the custom before the passing of the Act of 1815.

His Lordship made a note of the objection.

Cross-examined by Mr. Howard: I commenced to carry on the business of chemist and druggist in 1823. I was aware of the Act of 1815. I bought my drugs from wholesale druggists, and prepared my medicines according to the prescriptions, following the Pharmacopœia, which was then written both in Latin and English. When a physician's prescription was made up we dispensed the medicine. We prescribed medicine for people who came in to ask us about their complaints. We used no medical work, having previously acquired a knowledge of the uses and properties of drugs. In 1814 I had no kind of medical education.

Mr. Morgan Howard: And except your experience in the business you had no medical training?

Witness: Before 1815 I am speaking of what my master did. I was not in the habit of using Buchanan's "Practice of Medicine"; I discarded that from my mind.

You never went out of your shop to practise, I believe?—I did not, and that is the boundary of the Act—that is the distinction. Neither did my master.

You say you may examine patients and supply them with medicine so long as you do it within the four corners of your own shop?—That is my idea upon the authority of the Act.

Then you thought that was your view of the law in 1815?—I did not practise at all then. When I did commence I inferred that the Act allowed us to do what I have stated—that is our licence.

If I had had a headache and come into your shop in 1823 you would have made me up something?—Yes.

Mr. McIntyre: He would have given you something which would have done you a great deal of good, and you would have been greatly obliged to him.

Cross-examination continued: I never dealt with dangerous cases, which I would certainly send to a doctor. I have treated successfully a case of acute inflammation of the lungs, but should not, as a rule, deal with such cases.

Re-examined by Mr. McIntyre: Wheezing or cold I would prescribe for. I heard the evidence yesterday.

Mr. Thomas Parsons having been called,

His Lordship asked whether it was worth while carrying this part of the case farther?

Mr. McIntyre said it was only to bring the practice down to the present time. Mr. Parsons would, however, take the evidence back to 1812.

Mr. Parsons, of Swithland, in Leicestershire, chemist and druggist, said he could carry his memory back to 1809, when he was apprenticed for seven years in the city of Worcester. He had heard the evidence of the last witness as to counter-prescribing, and agreed with that.

Mr. McIntyre said he would not trouble to call any more witnesses.

Mr. Morgan Howard submitted here that there was no case for the defence to go to the jury. The evidence for the defence did not show that before 1815 chemists had proscribed for such cases as the defendant had treated.

Mr. McIntyre held that the last witness had proved it was the custom, when a person indisposed came to a chemist's shop, to ask what was the matter with him, and then to prescribe the medicine which, in the opinion of the chemist, seemed to suit the ailment. If the counsel for the prosecution had indicated that he should follow that line, he would have called other witnesses.

His Lordship having suggested that Mr. McIntyre was entitled to have his other witness examined,

Mr. George Godden, chemist and druggist, 82 years of age, was called, and said he was apprenticed in 1812 with Mr. Philipson, of Chichester. Before 1815 his master used to dispense to customers. Had heard Mr. Cupiss's evidence regarding counter prescriptions, and agreed with it. That practice was limited to simple complaints, such as coughs, local diseases, and eruptions of the skin—patent local complaints.

By His Lordship: If a man came to me suffering from bronchitis I should prescribe. I have cured myself of it.

His Lordship: In your statement of defence you have referred only to simple complaints, Mr. McIntyre.

Mr. McIntyre: Could not those words be struck out—the other paragraphs cover them?

His Lordship: That is not the issue you have to try.

Examination resumed: Never treated a child for convulsions. By simple complaints, I mean coughs, colds, cutaneous diseases, &c.

Mr. Morgan Howard: A boil or a cut finger I suppose.

Witness: Yes.

Mr. Morgan Howard: I shall not trouble you any further; you may go.

His Lordship: Now it is a matter for consideration whether there is a question for the jury as regards the charge of advising and supplying medicines.

Mr. McIntyre: The charge is attending.

His Lordship: You say they do not attend.

Mr. Morgan Howard: The words in the charge are "attending, advising, and supplying."

His Lordship: You, Mr. McIntyre, say he did not attend.

Mr. McIntyre: Not within the meaning of the statute.

His Lordship: Then I must ask the jury to say whether the defendant attended, advised, and supplied medicines, and whether in doing so he acted as an apothecary.

Mr. McIntyre: The only other question is whether, before 1815, what was done by this gentleman was done by chemists and druggists. We deny that we practised as an apothecary by "attending, advising, and supplying." Then will come the question of whether the trade of a chemist or druggist was carried on by defendant in the way it was carried on previous to 1815.

His Lordship: I shall not put that. The Act of Parliament says that the trade or business of a chemist shall be carried on as before. There is no dispute about that. There is no evidence to the contrary.

Mr. McIntyre: The third point will be, whether what the defendant did was within the custom.

His Lordship: You say the defendant prepared, compounded, and dispensed drugs in the same way as before the Act.

Mr. McIntyre: In other words, it is the same thing.

Mr. Morgan Howard: It is almost a question for your Lordship. I submit it is a question of law.

His Lordship: I think so, too.

Mr. McIntyre: First of all, I shall ask the jury to find that the gentleman did not attend, advise, and dispense medicines as an apothecary.

His Lordship: I should say, "attend, supply, or advise." Did he attend, advise, or supply, as an apothecary?

Mr. McIntyre: Supplying medicines he would be clearly entitled to do; but you say, "as an apothecary." It would be for your Lordship to tell the jury what that means. The other question you say is proved—namely, that before 1815 chemists and druggists in simple complaints did dispense or prescribe.

His Lordship: There is no contradiction of that. There is no question for the jury upon that.

Mr. McIntyre: Then you would rule paragraph 5 as proved.

The second question will be, whether what the defendant did was in accordance with the custom?

His Lordship: Where few persons suffered from simple complaints—that is what you mean to say.

Mr. McIntyre: Then your lordship considers that practice is limited to simple cases?

His Lordship: That is your own language. Were the complaints which the children were suffering from complaints of such a character as it has been shown it was customary for chemists and druggists to prescribe for; that is what the jury will have to say, as we have had it proved that the custom of proscribing in certain cases has existed.

Mr. McIntyre then proceeded to sum up the case, pointing out to the jury the questions which they would be called upon to decide. In the present case the defendant had given medicine to the woman's child, but had told the mother to send for a medical man if it grew worse. In the case of a sore throat he had given medicine for the child, and in the case of Rhodes, where the child died of scarlet fever, he prescribed according to the symptoms detailed to him by the grandmother. In that case the child did not die until a week afterwards. He did not consider that could be called attending, advising, and supplying medicine as an apothecary, and contended it was doing whatas they had heard from the witnesses, chemists did before and since the passing of the Act of 1815. In the case of Fanny Grist, defendant gave something to ease the child, but only until the medical man could be called in, and he did not think that could be considered as acting as an apothecary. When Rosina Bennett went, it was with a case of bronchitis in its early stage; and they found from one of the defendant's witnesses that that was a kind of ailment chemists and druggists were in the habit of treating. In the case of the child Leggatt all he was told by the grandmother was that the child was suffering from a violent cold. Were these ailments such as would have been treated by chemists before 1814? With respect to the case where he did see the children they might well be regarded as such; and where he did not see the children the description of their symptoms was such as would lead him to believe that those came within the same class.

Mr. Morgan Howard then replied upon the whole case. The Act of Parliament under which the charge was brought had been established for a great number of years for the benefit of the public, and the Apothecaries' Society were only anxious to protect the public from unlicensed and incapable practitioners. It was only when chemists overstepped the limits good sense would suggest that this Act was put into operation. Previous to 1815 great evil had resulted from the want of such a statute, and in the present case the Society was only discharging a public duty. The jury had to find whether Mr. Wiggins had actually been acting as an apothecary. His attending was not necessary to prove he did so. If he supplied according to the symptoms as stated to him, he held that would be quite sufficient to bring him within the scope of the Act. The statement of defence gave an interpretation to the conduct of the defendant, which did not include any but simple ailments as those which might be treated—such as persons, in fact, might do in their own homes—but had not invited their attention to the attendance of chemists in such cases as bronchitis or scarlet fever, which here were treated by the defendant. If it were possible to distinguish between unlicensed persons dealing with diseases of this character, it was in this case, where a person undertook to deal with scarlet fever without any opportunity of judging of the disease from the appearance of the patient herself. For the sake of the gain obtained from the sale of the medicines he did this; and he asked the jury to put a stop to such a state of things, and to say that it was not to be tolerated, and give the Legislature grounds for dealing with the question. To let it go forth that this might be done would be to put a premium upon a most dangerous practice in cases of this kind. Here in a case of bronchitis Mr. Wiggins undertook to treat with bottles of medicine, and the child died. It was not like a person going into a shop and asking for a dose of Gregory's powder. There they specified the medicine because they knew what they wanted. If they asked a chemist for a thing which was injurious, the wrong done was their own. The harm done was when the uneducated chemist undertook to deal with cases as a properly qualified medical man would deal with them—question a man, examine him, and then prescribe for him. It was monstrous that chemists should be permitted to dispense over their counters, after a slight examination, for the sake of the gain from their pushing the sale

their medicines. The apothecary was a very different person. He had to pass very severe examinations with respect to his medical skill, and until he obtained his certificate he could not practise according to law. If the law in the present case were put in force he held that there would soon be a stop put to the existing illegal practices. He now wanted the jury to say that in the present instance the cases dealt with were not simple complaints as stated in the plea for the defence; and that upon that point in the first instance the defence had entirely failed. It would be most disastrous that a chemist should be allowed to deal with a complaint which should only be handed over to be dealt with by a competent medical man when much valuable time had been lost, and when the unlicensed practitioner's treatment had failed. The question substantially appeared to be whether these were simple complaints, because if they were not defendant was practising as an apothecary, and doing what, pernicious prior to 1815, was pernicious now, when medical science was brought more within the means of every class of the community.

His Lordship then proceeded to sum up. He said the jury, although they had in this case to deal with a matter of very great importance, had really a very simple question to decide. In the first place Mr. Wiggins was not to be blamed for what he had done in any way. He had done what for many years other respectable chemists had been doing, but it was for the jury to say whether they considered it was within the Act of Parliament. The poor children died, but they must not let the fact of their deaths enter into their minds at all, for they were not there to decide whether the children died from bad practice or not. At the same time it was a matter affecting the case that the diseases from which the children suffered were of such a character that they caused death within a very few days. They had naturally, in the first place, been told a great deal of the advantages of the Act; and next they had heard a great deal of the disadvantage, or supposed disadvantage, in poor people being prevented from obtaining from a chemist and druggist for sixpence or sevenpence what they would have to pay mere for to a regular apothecary. That was a matter they must not go into; if they did that they would be making a law and not deciding upon a law already in existence. If the statute of 1815 was wrong let the Legislature alter it; and he had always thought that the best way in which the attention of the Legislature could be brought to anything defective in the law was to decide upon the law as they found it. He hoped they would guard themselves most carefully from making any mistake in that matter. The question was whether what had been done in the present case was within the law. Before the passing of the Act of 1815 the medical profession was divided into four different branches. There was the physician, who prescribed, there was the surgeon, the apothecary, and the chemist and druggist. There was no doubt that prior to the passing of the Act the apothecary had acquired the right of not merely selling medicine, but of advising people what they should take. He had in fact become what is now known as the general practitioner, but who was the apothecary created by Act of Parliament and custom before? He was neither physician nor surgeon. Then after him came the chemist and druggist, in reference to whose duties they were now called upon to give a decision. They would have to say whether or not, in doing what he did, the defendant acted and practised as an apothecary, namely, by "attending, prescribing, and supplying medicines." They must not take that to mean "attending, prescribing, and supplying" altogether. They were to say whether he did any one of those things in the character of an apothecary. The Act giving powers to the Company of Apothecaries set forth it was the duty of "every person using or exercising the art and mystery of an apothecary to dispense such medicines as may be prescribed by any physician," and the Act also prescribed that examiners should be appointed to ascertain whether the persons seeking to practise as apothecaries possessed the requisite amount of skill, and stated that it should not be lawful for any person to practise as an apothecary without his possessing a certificate of his qualification given by the examiners. That examination was to be for the purpose of ascertaining the skill or ability of such persons in the science and practice of medicine, and nothing could be more clearly laid down. The Act said that before a person practised as an apothecary he must be such a man; he must be found to possess a certain amount of skill in dealing with medicines. That was the language of the Act with reference to the qualifications of an apothecary, and from it they might infer what the duty of an

apothecary was. Then there was another section which laid down what the duty of a chemist and druggist was. The 28th section said that nothing in the Act should extend or be considered to extend so as to prejudice or affect in any way the trade or business of a chemist and druggist in preparing, compounding, dispensing, or vending medicines or medicinal compounds, wholesale or retail, and that all persons using or exercising the said trade of a chemist and druggist, or who should thereafter do so, would exercise or carry on the said business in the same manner as the trade or business was carried on before the passing of the Act. Mr. McIntyre put great stress upon the word dispense. It was the duty of apothecaries to prepare and dispense what a physician would order. Dispensing undoubtedly was part of the duty of an apothecary; and chemists and druggists would buy, prepare, and vend medicines wholesale and retail. It was now a question for them whether in this case the defendant had dispensed medicines as a chemist, or whether he had advised and supplied medicines as an apothecary. The duty of an apothecary was to judge of internal disease as distinguished from the practice of a surgeon; and they would have to say here whether the defendant had acted as an apothecary by attending, advising, and supplying medicines. Here they found in the case of the child Calverwell, that it appeared to have a cold, though the case afterwards turned out to be one of pneumonia. The defendant treated the child; and the question was, Did he, in so treating the child, act as an apothecary? Here he sold the medicine—he compounded it, he prepared it, and he dispensed it. Did he do that as an apothecary? A chemist and druggist generally has prescriptions given to him, and all he has to do is to make up the prescriptions as the doctor tells him. In the way of his trade you simply ask him for something, and he gives it to you. But in the present case he asks what are the symptoms, and having got them he advises them to continue a certain thing, and if that did not abate the disease then they should do something else. In the case of Fanny Grist the child was taken to him and he was asked for medicine. A witness said she told defendant that the child suffered from convulsions, and he then gave her a bottle of medicine and some powders. Subsequently when he saw her he advised that a doctor should be sent for. Was defendant in those cases practising as an apothecary? Here undoubtedly he used his skill. He did not merely act upon someone else's orders, did not merely give a specific thing asked for. Here a patient came to him and the symptoms were detailed to him at his request, and he exercised his skill and judgment in giving him advice and medicine. In doing that they would have to consider whether he was exercising the art and mystery of an apothecary. If they did so they would return a verdict for the plaintiffs. Then a question was raised under the 28th section, and it was said there was a custom. The allegation in the statement of defence was that in simple cases it was the custom previous to the Act for the chemist to prescribe, and no doubt that had been proved. It appeared to him that although the legislature did not wish to interfere with the trade of a chemist and druggist that its object was that persons who had to exercise their own judgment and skill should be persons that had undergone an examination and received a certificate. The evidence proved that before and since 1815 there had been a practice on the part of chemists and druggists without undergoing any examination or having any certificate as to ability or skill. The only question he would ask them was whether the cases of these children came within the custom as alleged. They would have to consider whether they could come to the conclusion that these diseases with which the children treated by defendant were afflicted were such complaints as were within the practice detailed by Mr. Cupiss. Mr. Cupiss, they would remember, said he never dealt in any case he considered dangerous. Mr. Parsons agreed with that, and said he understood the custom to refer to simple complaints. If they found the defendant did practise as an apothecary, he (his Lordship) would take that broadly, and ask them whether these complaints from which the children suffered were complaints of the character which it had been the practice of those engaged as chemists and druggists to treat previous to 1815. The evidence upon the point of custom was necessarily confined to a year or two before 1815, but they had also evidence of a continuance of the custom. What (his Lordship continued) I shall have to ask you will be, Did the defendant act and practise as an apothecary by advising and supplying medicines? Secondly, were the complaints he was attending to complaints within the custom as proved by Mr. Cupiss and Mr. Parsons?

After the jury had consulted for a few minutes the foreman said that they found that the defendant had practised as an apothecary in taking cases which were dangerous.

His Lordship: Then I shall give judgment for the plaintiff.

Mr. Morgan Howard: I shall only ask for one penalty.

His Lordship: Judgment for one penalty; I give you the costs. The judgment, therefore, will be for 20*l.* with costs. (To jury) Gentlemen, I agree with you.

The learned judge, addressing Mr. McIntyre, asked if there was at this time any measure before Parliament. Mr. McIntyre was not aware of one touching this question.

Mr. Justice Field thought some modification in the law might be made by communication between chemists and the Apothecaries' Society.

Mr. Morgan Howard said there was a suggestion that the penalty in the Apothecaries Act should be transferred to the Medical Act. He believed, however, the intentions of the Legislature remained the same.

BANKRUPTCIES AND LIQUIDATIONS.

RICHARD BARCROFT.

A MEETING of the creditors of Richard Barcroft, of Radcliffe Hall, manufacturing chemist, was held on June 4 at the offices of Mr. Williams, Barton Arcade, Manchester. A statement of affairs, prepared by the receiver, Mr. C. M. Merchant, accountant, of Bury, was submitted, showing liabilities unsecured 2,020*l.*, and assets 1,415*l.* A composition of 10*s.* in the pound, payable at four, eight, and twelve months, was accepted. Messrs. T. A. & J. Grundy & Co., solicitors, represented the debtor.

THE MEETING OF CREDITORS.

CLOSE & LEGG, Wholesale and Export Druggists, 28 Jewry Street, Aldgate, and 91 Leadenhall Street.

THIS case was noticed in our last issue. The debtors filed their petition on April 26, and at the meeting of creditors, held on May 25, it was resolved that the estate should be liquidated by arrangement, Mr. Edward Moore, accountant, 3 Crosby Square, being appointed trustee, together with the following committee of inspection:—Mr. Arnold Baiss, Jewry Street; Mr. Charles Jarrett, of Croydon; and Mr. James R. Rickman, of 17 St. Bride Street, Ludgate Circus. The statement of the joint affairs showed unsecured debts, 2,785*l.* 19*s.* 3*d.*; debts fully secured, 102*l.* 16*s.* 6*d.*; debts partly secured, 500*l.* (the security being valued at 149*l.*); and preferential claims, 4*l.* 11*s.* 8*d.*; making the total unsecured liability 3,141*l.* 10*s.* 11*d.* Assets, 510*l.* 13*s.*, consisting of stock, book debts, furniture, and surplus from securities in the hands of creditors. The case was brought before Mr. Registrar Hazlitt, on the 3rd inst., upon the hearing of an application for leave to register the resolutions come to by the creditors. Mr. Knight (Loughborough & Knight) said that several creditors, amounting in all to about 90*l.*, had not been served with notice of the meeting, but notice had been given to them of the application to register. The validity of the resolutions was not affected by the omission of notice to the creditors in question, and Mr. Registrar Hazlitt ordered registration.

A MEETING of creditors in this estate was held on May 25. The chair was taken by Mr. Edward Moore, who represented the largest creditors. The debts proved amounted to between 3,000*l.* and 4,000*l.*, part of which, however, included bills under discount, and would run off: the amount expected to rank against the estate being about 3,000*l.* The assets are very small, and will probably only leave an insignificant dividend. The only explanation of the failure was that the debtors had drawn out between them in about a year and a half (the time they had been in business) over 2,000*l.*; they had in reality lived upon the credit they obtained, as most of their orders were accompanied by cash or else were drawn for and hypothecated with the banks. They did not appear to have made a single bad debt. There was nothing to be had from their private estates, as they were heavily in debt to their tradesmen. It was resolved to liquidate in bankruptcy, and Mr. Edward Moore, of Crosby Square, was appointed trustee.

W. J. COLEMAN, Manufacturing Chemist, 20 Budge Row, E.C.

THE adjudication in this case was made on May 8, upon the petition of Mr. H. B. Condy, manufacturing chemist, Battersea, a creditor for 78*l.* 8*s.* 8*d.*; and the first meeting under the bankruptcy took place on May 21, before Mr. Registrar Brougham. No accounts were rendered, and, in the absence of a quorum of creditors, a trustee could not be appointed. The meeting was accordingly adjourned.

GREGORY & SCOVELL, Love Lane, Bankside, Southwark.

THE debtors, Thomas Rodger Gregory and Robert Scovell, trading in copartnership as black lead manufacturers, drug grinders and packers, under the firm of George Mayor & Co., have filed a petition for liquidation, and Mr. Hollams applied to the Court on May 28 for the appointment of Mr. Arthur Cooper, accountant, George Street, Mansion House, as receiver and manager of the estate, and for an interim order restraining further proceedings in two actions. The liabilities were about 8,000*l.*, and the assets—consisting of stock, machinery, furniture, &c.—were of the estimated value of 2,500*l.* There were 26 hands employed in the business, and it was desirable that the business should be carried on until the meeting of creditors. Mr. Registrar Pepys appointed Mr. Cooper to the office of receiver, and granted an interim injunction, but said that the application for a manager must be supported by creditors. On May 31 the application was renewed for the appointment of Mr. Cooper as manager as well as receiver, and being supported by creditors for 1,800*l.*, Mr. Registrar Hazlitt made the order. The following is a schedule of the principal creditors:—

	£	s.	d.
— Neuburger, 19 Palmerston Buildings, E.C. ..	2,800	0	0
Rehder & Co., 79 Mark Lane	1,800	0	0
Ihlee & Horne, 11 Aldermanbury	460	0	0
C. E. Bird, 4 Change Alley, E.C.	368	17	4
Williams & Co., Aniline Dye Works, Brentford ..	200	0	0
George Barker & Co., 39 Mark Lane	140	0	0
R. Dare, King Street, Hammersmith	102	2	7
Judd & Co., St. Andrew's Hill, E.C.	100	0	0
W. H. Morrison, South Castle Street, Liverpool ..	70	0	0
H. C. Barker, St. Michael's House, Cornhill ..	56	0	0
— Fontana, 17 Old Broad Street	52	5	0
E. F. Crookenden, 305 Deptford Lower Road ..	50	0	0
S. Kessel, 5 Skinner's Place, Size Lane	46	0	0
— Pollak, Pragg, Germany	39	0	0
Howard & Jones, 16 Cullum Street, E.C.	30	0	0
F. Kemp, 60 Lombard Street	25	0	0
Victor & Co., 57 Aldersgate Street	24	18	0
Weston & Westall, 115 Lower Thames Street ..	20	5	0
Carter & Rolles, Bankside, S.E.	15	0	0
G. Mesmacker, 29 London Wall	10	1	0
Henry Smith & Co., 9 Black Raven Court, E.C. ..	10	0	0
Barelay & Fry, 9 College Hill	10	0	0
Boas & Co., 56 Golden Lane, E.C.	10	0	0

Separate Creditors of Mr. Gregory.

	£	s.	d.
Trustees of Lady Cullum	300	0	0
G. Wulff, 147 Gracechurch Street (secured) ..	300	0	0
Protector Endowment, Loan, and Annuity Company	200	0	0
Rehder & Co., 79 Mark Lane	160	0	0
J. E. Gregory, 47 Greysot Road, Clapham Junction ..	15	0	0
J. Beale, 2 Stowe Road, Shepherd's Bush	15	0	0

Separate Creditors of Mr. Scovell.

	£	s.	d.
Bess & Parr, 19 Mincing Lane	100	0	0
P. Anstead, 3 Victoria Place, Bermondsey	50	0	0
London and County Advance and Discount Company	40	0	0
J. Reid & Co., Southwark Street	40	0	0
P. S. Welchman, Rutland Hotel, Hammersmith ..	30	0	0
G. Oram, 2 Edmund's Place, Aldersgate Street ..	25	0	0
F. Kemp, 60 Lombard Street	20	0	0
— Fontana, 17 Old Broad Street	20	0	0
A. C. Brown, Salter's Hall Court, E.C.	20	0	0
— Jackson, 1 Little Tower Street	10	0	0

On the matter again coming before the Court on the 4th inst., Mr. Registrar Murray, in the absence of opposition, continued the interim injunction previously granted, until after the meeting of creditors, which will be held on the 17th inst., at 3 o'clock, at the offices of Messrs. Cooper Brothers & Co., 14 George Street, Mansion House.

J. H. LEWIS, Toilet Soap Manufacturer, 41 Redcross Street, Southwark.

THE debtor, carrying on business at the Redcross Toilet Soap Works, filed his petition for liquidation on the 7th inst., and on the same day Mr. Heathfield applied to Mr. Registrar Hazlitt for the appointment of Mr. S. H. Langridge, of 193 Palmerston Buildings, Old Broad Street, auctioneer and valuer, as

receiver of the estate, and for an intorim order restraining further proceedings in an action. The liabilities were about 1,200*l.*, and assets 250*l.* His Honour granted the application.

FRANK WILTON & Co.

An adjourned meeting of the creditors in this estate was held at the Guildhall Tavern on May 17, Mr. Wilton having been prevented from attending the previous meeting through illness. The representative of Messrs. Bancroft & Co., Liverpool, was voted to the chair.

Mr. Vansandau, the debtor's solicitor, explained that since the previous meeting a Mr. Atkinson, of Newcastle, had failed, and that he had held acceptances of Wilton's amounting in all to 3,616*l.* It was to be feared that a good portion of this sum would rank against the estate.

Mr. Rabbidge, the accountant, explained the matter more fully. He said he had to lay before the creditors the following amended statement, which showed a position much worse than that which had been put down in the approximate statement first drawn up:—

Liabilities.

	£	s.	d.	£	s.	d.
Unsecured creditors, as per list				4,195	14	0
Creditors fully secured	1,209	0	6			
Less estimated value of securities	1,389	17	3			
Surplus to contra	180	16	9			
Creditors partly secured	1,152	11	5			
Estimated value of securities	1,032	0	0	120	11	5
Other liabilities	5,347	18	11			
Expected to rank				5,297	18	11
Liabilities on bills discounted	14,824	2	10			
Of which it is expected will rank against the estate for dividend				1,945	4	0
Creditors for rent, rates, taxes, and wages, payable in full	73	9	11			
Total debts				11,559	8	4

Assets.

	£	s.	d.	£	s.	d.
Goods in sundry places, estimated at				753	16	3
Book debts about	1,724	19	10			
Estimated to produce				1,168	9	10
Furniture, fixtures, and fittings, at 336 City Road, and at offices, estimated to produce				290	0	0
Surplus from securities in the hands of creditors fully secured, see contra				180	16	9
				2,413	2	10
Less rent, rates, taxes, wages, &c., payable in full				73	9	11
Total assets				2,339	12	11

Atkinson was not originally included in the list, because he had stated to Wilton that the acceptances were still in his (Atkinson's) desk. He had since stated by telegraph that he had forwarded those acceptances to his solicitor in London, but on inquiry this was not found to be correct. One bill had certainly been negotiated, and it was very probable that others had been employed likewise. This made a difference of 3,616*l.* There were also some new claims and other errors, which brought up the extra deficit to 5,168*l.* Among the items it had been stated that the City Bank held security for more than its claim, a surplus of 800*l.* having been estimated. This, it turned out, was on a parcel of galls deposited with the bank; but it now appeared that a serious fall in the value of the galls removed that surplus altogether.

Mr. Wilton was called in, and in reply to some questions he said Mr. Atkinson had never been a partner with him; he had never said he was, but he admitted that he had told Mr. Green that Atkinson was interested in his (Wilton's) business. The interest consisted in mutual accommodation.

Further questions in reference to the transactions between Waud & Graves and Wilton were replied to by Mr. Rabbidge, who said it had been extremely difficult to unravel the cash transactions, as the only book or memoranda which he had had to rely on had been a pocket-book of Mr. Graves. As far as he could make out, the payments by Waud & Graves would amount to 60,000*l.*, and their drawings to 57,000*l.* Wilton had certainly lost nothing by Waud & Graves, but the creditors would have had a claim on the estate of Waud & Graves, but there was nothing to gain from that quarter. Wilton's trading

account showed transactions to the extent of 37,000*l.* in the ten months. A loss of 2,240*l.* could be traced to special speculations, his business expenses amounted to 2,300*l.*, and his private expenses to 589*l.* The books had been very badly kept. He had found the cash book only balanced to December 31.

Some creditors were impatient to know whether any offer of composition was to be submitted. In reply it was stated that until the affair of Atkinson's had been disclosed Mr. Griffith, of Liverpool, had been willing to guarantee 4*s.* in the pound. It was not certain if Mr. Griffith would still give the same guarantee. He was now on the continent and could not be communicated with for a few days. Mr. Wilton, however, expressed his confidence that Mr. Griffith would still be willing to make the offer. The representative of Mr. Green (a creditor for 400*l.*) was not disposed to consent to this proposal. His principal would rather lose his money than hand back the estate to a man who had proved himself so utterly incapable of conducting a business and so certain to bring it to shipwreck as Wilton. He thought this was a case requiring careful investigation. None of the creditors knew what had been the relations between Waud & Graves, and Wilton and Atkinson, and these ought to be made clearer. He moved that the estate be wound up in bankruptcy.

This proposal was not seconded, but most of the creditors present agreed to the proposal which had been made of a composition of 4*s.* in the pound payable in three months, and to be guaranteed to the satisfaction of a committee consisting of Messrs. C. Christopherson, Hetherington Smith, and Cyriax.

The Poison Cupboard.

MORPHIA POISONING.—The *Philadelphia Medical and Surgical Reporter* states that a death has occurred at Washington from the hypodermic injection of one-sixth of a grain of morphia. This is perhaps the smallest fatal dose recorded.

LA "FRANCE MÉDICALE" of April 13 records a case of poisoning by digitaline. A woman aged 28 procured 74 of Hornolle & Quevenne's digitaline granules, each containing one mgr. of the alkaloid. She swallowed 14 at first, and 60 next day. In eight days she was discharged from the hospital cured.

MR. GEO. W. BATES, of Philadelphia, U.S., says that he has made and sold lozenges for twenty years, using chromate of lead as the colouring agent, and he has never known a case of injury to a single person. Directions for taking this with salt are not given by the *Philadelphia Druggist and Chemist*, whence we take the note.

POISONING BY INK.—The *Rheims Courante* says that a scholar in the Oberlahnstein High School incautiously smeared his upper lip with ink. On this lip there was a small sore, and after some time it began to swell. The swelling rapidly spread to the neighbouring parts of the face, and attacked the inner surface of the mouth. Delirium set in after two days, followed on the fourth by death.

CICUTA BULBIFERA.—The *Canadian Pharmaceutical Journal* records a fatal case of poisoning by *Cicuta Bulbifera* at Teeswater, County Bruce, Canada. Two children ate a small quantity of the root of this plant, known in the neighbourhood as water parsnip. Both were soon seized with convulsions, one died within half an hour, the other recovered after the administration of an emetic. *Cicuta bulbifera* is probably the American representative of the European *Cicuta virosa* L.

OPIMUM-DUCKS.—In Mr. Baber's recently-published official report on the route of Mr. Grosvenor's mission through the great opium-growing districts of China, between Ssü-chan and Yuman, it is said the whole district is given over, for hundreds of miles, to the cultivation of opium and ducks, called locally "opium-ducks," which frequently supplied Mr. Baber and his party with a meal, and do, he says, really appear to stupefy themselves by feeding on the narcotic vegetable. They allowed the travellers to walk openly up to within twenty yards of them, and even then they rose very languidly. The natives assert that the flesh of these birds is so impregnated with laudanum as to exercise a soporific influence on the consumer. But a little more careful verification is necessary before a story of this kind is accepted in all its details.—*British Medical Journal*.

GREEN TEA AS AN OPIUM ANTIDOTE.—Dr. J. A. Sowell, M.D., of Quebec, writes to the *Medical Press and Circular* in answer to some criticisms which had been passed on a case of opium poisoning which he had treated with enemata of green tea with perfect success. His patient had swallowed 28 drachms of Battley's liq. opii sed. between 4 P.M. and 11 P.M. When the doctor arrived she seemed to be on the point of death, and as the readiest means of treatment an infusion of green tea was administered by enema. The result was that the patient recovered far more rapidly than in any previously recorded case. This is thought to be due to the superiority of tea over all other remedies, and to the greater speed of absorption by the rectum than by the stomach, which has been acted on by the opium.

Scientific Notes from Foreign Sources.

ON THE POISONOUS ACTION OF CARBOLIC ACID.*

PROFESSOR KUSTER has recently called attention to the injurious results sometimes attending the administration of this valuable drug. From experiments on dogs he finds the action of a poisonous dose to consist mainly in paralysis of the nervous centres. In small doses it is readily eliminated by the kidneys. Sulphate of soda has been proposed as an antidote, but Professor Kuster doubts whether the action of this drug is sufficiently rapid.

STRASSBURG TURPENTINE, ITS ORIGIN AND CHARACTER.†

THE author lives in a valley of the Vosges, and is, therefore, able to procure on the spot specimens of the article of guaranteed purity and known origin. He names it *Térébenthine des Vosges*; *Térébenthine vrai dite citriodore*; Bignon. Hanbury and Flückiger name it also *Térébenthine d'Alsace, ou de Strasbourg, ou du sapin, ou au citron*; in English, *Strassburg Turpentine*; German, *Strassburger Terpenthin*. It is the product of the *Sapin* (French), *Weisstanne* or *Edeltanne* (German), *Silver Fir* (English), *Abies pectinata* D. C., *Pinus abies* Du Roy (not *P. Picea* L. In the valleys of the Vosges 25 per cent. of the trees are of this species. It flourishes best on the northern slopes of the mountains, at an altitude of 600 to 800 metres, and yields most turpentine when from 25 to 50 years old. It is then 8 to 15 metres high. After this age the quantity decreases, and at 60 years becomes inappreciable.

A few years since 10 to 15 mountaineers annually appeared in the valley and established themselves at a farm house, which became the centre of their forest explorations. Latterly but two or three have come to gather a quintal or two of turpentine. This is contained in little bladders in the bark, from the size of a pin's head to that of a bean, the larger ones elongated in the direction of the axis. A vessel of tinplate, shaped like a sharply-pointed horn, is used to pierce the bladders, and a tin can hanging at the side receives the day's gathering. The harvest is tedious, laborious, and even dangerous, for the large trunks must be climbed to reach the bladders in the higher parts of the tree. No incisions are ever made. The crude product is roughly purified by standing it in the sun in the tin cans to allow heavy impurities to settle; it is then filtered through a bed of the ranebes and needles of the silver fir placed in a funnel of bark. When purified it sells at 4f. 80c. to 5f. 50c. a kilogram.

The fresh oleo resin is very fluid, flowing like syrup, colour like amber, odour balsamic, sweet but not cloying, recalling that of lemons, and becoming more apparent in alcoholic solution; taste very acrid, slightly bitter. It is strongly acid, and dries easily, losing weight. It is soluble in its own weight of alcohol, the solution remaining clear after three months' rest. It is solidified in a few hours by $\frac{1}{10}$ of its weight of magnesia, and after 24 hours the mass becomes almost brittle. The last two characters are the most important, as Guibort and Dervault respectively announce their absence in *Térébenthine de Strassbourg ou des Vosges*.

TO DISTINGUISH BLUE FROM GREEN.

Dr. EUGENE BORGMANN, in a German dyers' journal, quoted in Dr. Hager's *Centralhalle*, remarks on the difficulty of distinguishing a light blue from a green by artificial light. This is due, he says, to the fact that all our usual lights emit a yellowish

and not a white light. [This fact is at once verified by the presence of the electric light for example, or if gas or a candle is burned in full daylight.] This yellow light combines with a light blue dye and causes a material so dyed to appear green. By the magnesium light the difference is at once discerned, but this is not frequently accessible. The author has found, however, that the colours may be readily distinguished by the flame from the ordinary Swedish matches. These are tipped with sulphide of antimony which burns like magnesium with a white light.

POTASSIUM PERMANGANATE EXPLOSIONS.

A QUESTION in the *Pharmaceutische Zeitung* has elicited several interesting, though not quite novel, facts. It seems that some extract. *millefolii* exploded when rubbed in a mortar with potassium permanganate. Dr. Fr. Reichel says that the free acid in the extract liberated permanganic acid, which, in turn, attacked the organic matter so violently as to cause the explosion. If the acid is neutralised by carbonate of soda before the permanganate is added, no explosion occurs. Richard Hoffmann assigns it to the essential oil in the extract. When the oil is rubbed with the salt, flames break out, followed by a violent explosion. Phenol, the hydrocarbons, such as campher, benzol, and oil of orange peel, and the oxygenated oils, as ol. calami, ol. valerianæ, and their corresponding extracts behave in the same way.

CANNABIS INDICA.

P. M. SUTHERLAND, M.D., SURVEYOR GENERAL IN NATAL.*

IN Natal "there is a native variety of this valuable plant (the hemp), or possibly of the *Cannabis indica* which is a near ally of the European hemp, which grows everywhere with the most unstinted luxuriance, and which yields an excellent fibre. It is known by the native names of "Insangu" and "Dacha," and is very generally used by the natives for the manufacture of a coarse cordage. The dried stem is also smoked for its narcotic effects. The plant is, indeed, the same that furnishes the Arabs of the northern part of the continent with "Hasheesh."

ALBUMINATE OF IRON.†

It is not quite certain in what chemical form iron is assimilated, when taken either in a native state or through ferrous or ferric salts. It is generally believed that it is first formed into an albuminate. It is certain that in the blood it always exists in the state of ferric oxide, but whence is derived the oxygen necessary for the superoxidation of the native iron or the ferrous salts is not clear. Possibly it is furnished by the air introduced into the stomach with the food. Some observers, however, maintain that the labour of this chemical process should not be imposed on the digestive apparatus.

Dr. Treize claims to have obtained some marvellous results with a solution of ferric albuminate produced by treating the white of eggs with perchloride of iron, washing the precipitate until the excess of chloride and hydrochloric acid is eliminated, and then dissolving it in distilled water, acidulated by hydrochloric acid. The process has been slightly modified by M. Kobligk, of Berlin, thus:—Mix the white of one egg, with 10 grammes of liquid perchloride of iron. Collect on a filter the reddish brown precipitate which forms, and wash it in distilled water until the liquid passes perfectly transparent. The precipitate is then dissolved in 500 grammes of distilled water, acidulated by twelve drops of hydrochloric acid.

Albuminate of iron should be freshly prepared, or it becomes insoluble, and it should be administered in solution (a table spoonful three times a day). 100 grammes of this solution contain ferric albuminate equal to .028—.056 of metallic iron, varying according to the size of the eggs. This is not a strong dose, but is sufficient, and is easily assimilated. The albuminate itself contains 2.80 per cent. of metallic iron.

Dr. Treize has employed this preparation with great success in pulmonary diseases, adding to 250 grammes of albuminate, 12 drops of a solution of 0.05 of phosphorus in 30 grammes of sulphuric ether.

This compound has some analogy with the *poudre de sang* recently introduced, which, so far as we know, has not proved a success.

* *Pharmaceut. Zeitung*.

† An abstract of a paper by E. G. in *Le Monde Pharmaceutique*, de Mai 5, 1878.

* In *Journal of the Society of Arts*, May 8, 1878, where further information is given on the culture of the plant.

† *Journal de Pharmacie d'Alsace-Lorraine*.



For particulars of Advertisements, Subscriptions, &c., please refer to the first page of Literary matter. An Index to the Advertisements contained in this issue will be found in the front portion of the Journal.

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For confirmation of this assertion, see the opinions of such authorities as Dr. BARTLETT, Professor WANKLYN, and others, at page 74, December, 1876.

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EDITORIAL NOTES.

THE ANNUAL MEETING OF THE PHARMACEUTICAL SOCIETY.

VISITORS to the annual meeting of the Pharmaceutical Society on the 15th of last month, if they were not particularly in earnest about any trade interests, could hardly help enjoying the lively sham fight provided for the occasion. There was some clever sparring, smart attacks and skilful defence; and the entertainment was concluded by a grand assault-at-arms, on the woman question, most appropriately finishing with an absurd fiasco, which left both sides equally satisfied.

The president of the Society did well in his opening address to advocate "the indirect but very certain process which [he and his party] have hitherto adopted" of advancing the interests of the trade. Considering the results attained it is surely time that the experiment of proceeding in a direct and distinct fashion was tried for a while. Anyway, this word of the president's indicates clearly enough the character of the difference between the two parties of pharmacy. He and the majority of the Council prefer a scheming, wriggling, serpentine or, as he puts it, an "indirect" policy; they believe when an enemy presents himself it is necessary to smile on him, and press his hand, and ask him to dinner; they believe that the best way to preserve their Pharmacy Act is to wrap it up in a napkin and bury it. If they do not believe these things they certainly act as if they did, and unless they believe these things we fail to understand the president's avowal of his preference for an "indirect" policy. Assuredly, so far as the president's survey of pharmaceutical topics extends, an indirect policy will do as well as any other, and none at all will do as well as that. As far as one might gather from that general summary, the most serious danger now threaten-

ing us is a declining attendance at the evening meetings at Bloomsbury.

A few remarks are suggested by the discussions which occurred at this meeting. First we may express a word of regret that so much good barking should be wasted. The clever speeches and the smart criticisms have no purpose; they serve only, as a rule, to show their author's brilliance. Several awkward resolutions were neatly shunted by the scheme of putting the Woman Question on the rails. It was a subject capable of exciting abundant talk, but one the importance of which may easily be over-estimated. It was a convenient toy for the annual meeting to play with, and the purpose was accomplished admirably. But the idea that the meeting was to do more than play with even this small subject seemed to thrill some of the worthy councillors with horror. Mr. Owen and Mr. Atkins almost "struck attitudes" when the discovery dawned on their minds that the discussion then taking place was to be in any sense definite. Mr. Owen would decline a seat on the Council rather than be bound by a decision of the annual meeting. Mr. Atkins thought it was quite proper that the question had been submitted to the meeting, but he seemed to think it would be a terrible degradation if the Council were to be bound by any decision come to. The members might well wonder what they had been called together for.

The financial statement called forth some important explanations. Mr. Urwick pointed out that the item of 483*l.* for "rent, taxes, and insurance" seemed larger than it used to be. The president fenced with the criticism for some minutes, and caught at several straws; but it was at last revealed that this item included 100*l.* beyond his regular salary paid to the secretary. Mr. Giles, adopting as usual his rôle of "superior person," was good enough to assure the members that if they had understood book-keeping they would have known that all was quite regular. For ourselves we say that such a fact is in the highest degree discreditable to all who have connived at it, the auditors not less than the Council. Mr. Bremridge has well earned a handsome salary, and the Society can well afford to pay it. There was absolutely no reason whatever for them to conceal his expenditure. What might be expected from them if they did spend any money which it was desirable to keep quiet? Mr. Andrews, one of the auditors, says he has urged that the 100*l.* should appear under salaries. The Society ought to insist on knowing why that suggestion was not followed. Mr. Andrews says the auditors have no power in the matter. We disagree with him; and further, we consider that at this time the auditors owe it to themselves and the Society to take some notice of the irregularity. Auditors are appointed expressly for the purpose of checking such a practice as the one lately revealed, and it is most important that they should clearly understand this.

Mr. Robbins, one of the Council, ought perhaps to be acquitted of any blame in respect of the financial statement, for in offering to set a previous speaker right about the Society's profit, he managed to understate that profit himself by about a thousand pounds.

Mr. Slipper threatens an agitation against the practice of asking questions concerning the metric system at the Preliminary Examination. We are sorry that we have no surplus stock of indignation to let out on that grievance.

The suggestion made by Mr. Symons was not a bad one, namely, that the Council should aim at getting a third part added to the poison schedule of the Pharmacy Act to cover medicines which, though not dangerous enough to label "poison," are sufficiently so to necessitate "a caution" label, and to be sold only by registered chemists.

Mr. Richardson would have the Council take up the grievance which patent medicine makers suffer in respect to French trade, and represent the case to our Foreign Minister. Many such

products are refused admission into France altogether, although French medicines may circulate here without any sort of hindrance. This matter, however, is a purely commercial one, and not one which concerns the pharmacists as a body. Surely the persons directly injured ought to be the ones to promote this agitation.

We shall not here comment on the appropriate episode with which this very unreal meeting wound up. Almost everybody seems to have blundered more or less, and to this hour no one knows exactly how the meeting voted. The consolation is that it was not of the slightest consequence, for clearly the Council meant to do exactly as it pleased in the matter.

The new Council will not be likely to vary to any great extent from its predecessor. We have now Mr. Woolley in place of Mr. Brown, Mr. Fairlie in place of Mr. Atherton, and Mr. Frazer in place of Mr. Owen. More members voted than ever before, and the country candidates were again in greater favour than those with London after their names. We are bound to assume that the distribution of the votes fairly indicates the opinions held by pharmaceutical chemists generally, and the Council is justified in assuming that its indirect, inactive, timid, supine policy is that which is most preferred by the majority of its members.

THE LIMITS OF COUNTER PRACTICE.

THE judgment of the Court of Queen's Bench in the action brought by the Society of Apothecaries against Mr. Wiggins, of Bermondsey, and defended by the Chemists' Trade Association, is not a promising subject for congratulation; it seems at first sight to ruthlessly dispose of the rights of chemists and druggists as human beings, and it helps to strengthen that fence of monopoly which the medical profession would fain establish round all diseases and complaints of the human system. But the result is by no means so bad as it looks at the first view. The apothecaries do more than the druggists can claim that it draws a rigid line beyond which the latter may not pass. The Judge, for example, although clear enough that in this particular case the limits of legitimate counter practice had been exceeded, made no such sweeping assertion as that of Baron Bramwell two years ago. That the exemption clause had some meaning was at least in some sort recognised; and all that the present judgment really affirms is that there is somewhere a line beyond which chemists may not pass, and that the defendant, in the cases alleged against him, had stepped beyond that line.

In the case just alluded to Baron Bramwell said that a chemist and druggist who should give a draught for a headache thereby rendered himself liable to the penalty prescribed by the Apothecaries Act. If Mr. Justice Field did not in so many words contradict that decision, his line of argument goes to prove at least that he did not adopt it. The latter Judge in effect ruled that the defendant had contravened the Apothecaries Act, not because, as a simple matter of fact, he had prescribed, but on the ground that he had gone beyond the limits which the Act permitted. This at any rate is an advance.

We cannot confess to any great admiration for Mr. Justice Field's summing up. We do not believe anyone, however impartial and however competent, would characterise it as "masterly" or "exhaustive." The tender way in which he touched on the notable "28th section," without daring to treat it boldly either one way or the other, was not encouraging to those who, on both sides, were seeking an authoritative opinion; nor do we think he gave the defendant sufficient benefit of the possibility that in one or two of the cases at any rate he had not reason to assume that the complaints treated were other than simple ones. Nevertheless, in simple justice to the side of the apothecaries, we cannot profess much surprise

at the result. There were on this case only two conclusions possible—either the one arrived at, or to assert that chemists were legally empowered to undertake any and every disease which might come before them. The latter conclusion would have simply reduced the Apothecaries Act to a dead letter.

We say, then, that the question decided in the case before us was not the question now in dispute between chemists and apothecaries. The great body of chemists and druggists are not anxious for such power as we have hinted at. They do not wish to defend the dangerous unqualified medical practice which some of their number have adopted. But they say they have a certain right reserved to them, and they are still determined to fight for that simple right to its extreme end. They are not unwilling that the apothecaries should have their fair rights. They believe, however, that they have, in common with every other British subject, and as human beings, the free right to express an opinion and even to offer advice on every subject, political, theological, medical, and all under heaven. They know that on the last-named subject, they of all men may easily "act as an apothecary," but they claim that, to a certain extent, they may even "act as an apothecary." This is the special privilege which the 28th section of the Act of 1815 gives them. The evidence brought forward by the defence in the late trial indicates the limit of that privilege, or at least would have indicated it if the counsel for the Trade Association had pressed his right to put all his witnesses in the box. That Mr. Wiggins had exceeded that privilege is, we think, as evident as that Baron Bramwell's dictum ignored it. Common sense is sufficient to indicate the line between the indefeasible right of everyone to offer advice, and "acting as an apothecary," and it ought to be sufficient to mark the indefinable line beyond which a chemist and druggist should not trespass.

It seems almost a pity, therefore, that the Trade Association should have chosen Mr. Wiggins' case as one on which to accept battle. It was nothing like a fair sample case of the counter-prescribing of chemists and druggists; and, as we believe, it settles nothing. It may be stated in excuse that it was impossible to get from the Apothecaries' Society full particulars of the cases alleged against the defendant. This, if true, only shows the disingenuousness of our opponents, but does not justify rashness on our part.

But let no one deceive himself. The Medical Defence Association, and the Apothecaries' Society too—for the latter body must be held responsible for all they sanction—are feeling their way to a much more complete victory than that which they have yet secured. They claim all that Baron Bramwell declared, so that there is plenty of room and necessity for defence still. In the case still awaiting trial—The Apothecaries Society v. Sheperley—the question is much simpler. The crime alleged against the chemist is that he gave a gargle for a simulated sore throat. No one can class that among such diseases as pneumonia and scarlet fever. Setting aside the unreality of the disease, however, we have a fair case of a simple complaint, and with such evidence as the Trade Association is able to bring we still look forward with confidence to the issue, believing that, taken all in all, the recent trial is rather favourable than otherwise to our prospects. We trust that the Trade Association will be heartily supported in their resolution to get that issue clearly settled. If the judges should decide that the 28th section of the Apothecaries Act was not intended to permit chemists to give medicines in such cases as sore throats, coughs, headaches and the multitude of small ailments to which the human frame is subject, we must join cordially together and subscribe liberally to get a clause or an Act which will give such power; and in this demand we shall most assuredly have the whole of the intelligent public with us.

CO-OPERATIVE STORES AND THE SALE OF POISONS.

We cordially congratulate the Pharmaceutical Council on their resolution at last to join issue with the proprietors of co-operative stores for the purpose of fairly testing the important question whether the latter may, under protection of the Limited Liability Companies Act, do that which is unquestionably forbidden to any private individual. Our last issue contained a short report of the commencement of the trial in which this issue has been raised, but to make the point clear we will briefly narrate the circumstances.

A certain Mr. William Mackness has been carrying on business in Tottenham Court Road for some time past under the style of the London and Provincial Supply Association. Among the other articles sold by him in this capacity were certain poisons, such as it was not lawful for any person to sell who was not a registered chemist and druggist. True, Mr. Mackness had in his employment a person who was on the register of chemists and druggists, but that admittedly was not a sufficient satisfaction of the law's requirements. Mr. Mackness was threatened with prosecution by the Pharmaceutical Society's solicitor, and he did not even attempt to fight the question on this point; he paid the penalty without going before a court of law. Then, acting, as we presume, on the advice of his solicitors, in order that he might continue his sale of poisons and his regular business as a chemist and druggist, he converted his business into a limited liability company, with a nominal capital of 6,000*l.*, of which stock he himself held nominally 5,640*l.* worth. The other shareholders were, as appears from the register, his father and two brothers, a clerk of his solicitors, and two or three persons employed at the establishment, including the registered chemist, a Mr. Longmore, who managed the pharmaceutical department. It seems clear enough that the business was as much Mr. Mackness's for all practical purposes as before, but we fail to see how this affects the question. There seems no doubt that he had only taken advantage of the facility given by law to form a limited liability company; and the company thus formed, though it may have been in some sense a sham, was a perfectly genuine one in the eyes of the law. We are quite unable to understand why Mr. Flux should have spent so much energy as he did in exposing the constitution of the company. There was no dispute about the distribution of the shares, and this too was quite separate from the real issue.

This legally formed joint-stock company then, as such, proceeded with the sale of poisons and the regular trade of a chemist and druggist, among their other avocations. The transaction proved against them was the sale of a mixture containing corrosive sublimate to one of Mr. Flux's clerks. The mixture was sent out, according to Professor Atfield's evidence, in a dirty condition, and the directions on the label were incorrectly translated from the prescription. The counsel for the defence seemed to think this a decent joke, and in truth it was no part of the question at issue. The real point was this: Is Mr. Wm. Mackness, as one member of a limited liability company, he not being a registered chemist and druggist, at liberty to be part proprietor of a chemist and druggist's business? Does the fact of his joining himself with six others, and getting registered under the Limited Liability Companies Act for a lawful purpose, permit him and his coadjutors to carry on a business which would be unlawful to most of them separately, or even to most of them conjointly unless incorporated under the Companies Act? This is the question which the Pharmaceutical Society asked of the Bloomsbury County Court judge. The defendants, represented by Mr. Sanders, the Recorder of Bath, replied that their chemists' and druggists' department was in charge of a duly qualified chemist, and

asked further whether it was reasonable to expect that the shareholders in a company consisting, it might be of four or five thousand shareholders, must all be registered before that company could deal in poisons? In other words, they put forward the monstrous claim that a limited liability company was not amenable to law. The county court judge admitted this claim. He says a company need only get a duly qualified chemist and druggist, and they then fulfil the intention of the legislature. We should like to know why they may do what an unregistered individual may not do?

The Pharmaceutical Council has done well in deciding to appeal against this decision. They have been a long while screwing up their courage to this sticking point, but they can hardly stop now until the whole broad question is settled. If the Bloomsbury judge is sustained in his opinion the Pharmacy Act is a farce, and it is well we should know it. If his judgment is over-ruled, a severe blow will have been dealt at a large mass of illegitimate pharmacy throughout the country. Several of the larger co-operative stores are, we believe, registered under the Friendly Societies Act, and not under the Limited Liability Act. Their pharmaceutical practice will, therefore, not be directly affected; but it will be seriously shaken. They pretend that they do not dispense directly for the public, but only for members of their own association. There are several shaky points of law about this contention, and we doubt not they will watch the present trial with extreme interest. Any way, the Pharmaceutical Council, as we have maintained for years, are bound in duty to the public as well as to their own members, to vindicate the law committed to their charge, and though they have been tardy and reluctant in taking the necessary measures, they none the less deserve hearty support now that they have determined to proceed.

ARSENICAL VIOLET POWDER.

Our readers have doubtless read in the daily papers full accounts of the prosecution of Henry George King, of 14 Abbott Street, Kingsland Green, London. He is the man to whom we referred last month in our article on this subject. He is not a registered chemist, but describes himself on his circulars as a wholesale druggist, drysalter, and general packer. We propose to give a brief summary of his trial before the magistrates. This was commenced on May 24, continued on May 31, and concluded on June 7, when the defendant was committed for trial at the Chelmsford assizes. He was required to find bail, 200*l.* in his own recognisances and two sureties in 100*l.* each.

Mr. Poland, instructed by Mr. Barnard Thomas, of the Treasury, conducted the prosecution; on the third day, Mr. Byfield (of Houghton & Byfield), watched the case on behalf of several wholesale druggists; King was not defended.

From the evidence and the statements of the prosecutor it appeared that, acting on the information furnished by Dr. Jones, analyst, Leadenhall Street, to the Local Government Board, and by his client, Mr. Deacon, to the Home Secretary, a gentleman was sent down to investigate the matter. On April 23 a letter was sent to King by the Treasury authorities informing him that proceedings would be taken against him for the sale of violet powder containing about 50 per cent. of white arsenic, and requiring him to give notice to all persons who had bought the powder to cease using it. The defendant took no notice of the letter until served with the summons, when he wrote (May 21) stating that he had used his utmost endeavours to stop its use. Other samples of powder analysed contained 25 and 28 per cent. of the poison. The use of the powder had been traced in 28 cases, in 12 or 13 of which death had occurred.

On the first day's trial, John Nottage and Emma Grout, both grocers, of Loughton, proved purchasing violet powder of the accused and selling it to various persons.

Isabella Martin and Hannah Reid, of Ash Green, Loughton, proved that the child of the former died on November 30, 1877, nine days after birth; that the defendant's violet powder had been used on it, and that wherever it was applied an eruption broke out, which finally turned black. Similar evidence was given by Elizabeth Sears, one of whose children died from its use on March 8, 1877, and another in fearful agony on February 13, 1878. Jane Whitebread stated that her child became ill when the powder was used, but recovered when fuller's earth was substituted.

On May 31 the principal evidence adduced was that of Dr. Dupré, of Westminster Hospital, who spoke to analysing the powder, and detecting in it large quantities of arsenic.

On June 7 Emma Jerret stated that her baby died on February 22, 1878, five days after birth, and that she had used the defendant's powder. She had used the powder previously, and also on her little boy, 2 years of age, without noticing any ill effects.

Sarah Clarke stated that her child died on August 21, six days after birth, and that she had used defendant's powder. She had also used it on the face of her daughter when suffering from measles, when the child's face turned black. On substituting flour and sweet oil she recovered.

Lucy Wade stated that when she used the powder on her child it became ill, but recovered when its use was abandoned.

Mrs. Bengfield A'Court, tobacconist and newsagent, of 264 Cambridge Road, Hackney, and J. F. Gilles, grocer, High Street, Kingsland, spoke to purchasing violet powder of the defendant, selling some of it, and handing the remainder to detectives from Scotland Yard.

Mr. H. W. Power, Medical Inspector for the Local Government Board, proved making enquiries and receiving samples of the powder.

Dr. Fowler, of Epping, W. T. Lewis, Esq., of Loughton, and Dr. A. M. Roberts, of Buckhurst Hill, swore that they attended various children suffering from arsenical poisoning, presumably caused by the powder.

Mr. Poland stated that he should call no more evidence at present, but asked that the defendant be committed for trial for the manslaughter of the children of Martin, Sears, and Harrington. Probably other charges would be preferred at the Assizes, but due notice would be given of them to the defendant. Prisoner asserted his innocence, reserved his defence, and was committed for trial.

Notices of various other cases have appeared in the papers. H. A. Husband, in the *Medical Examiner*, records a case where violet powder which had been given to the father by a hair-dresser of Stoke Newington, had caused symptoms of arsenic poisoning. Dr. Frank Reid, medical officer of Edmonton, had seen cases of arsenical poisoning by violet powder, labelled "King, Abbott's Road, Kingsland," and by his advice the sanitary inspector was instructed to warn all vendors not to sell powder bearing this name.

William Foster, Lecturer on Chemistry at the Middlesex Hospital, states in a letter to the *Lancet*, dated May 21, that he has found 4½ per cent. of white arsenic, and a moderate quantity of lead in some violet powder, "purchased at a respectable retail chemist's in the north of London." Of course this Mr. Foster is an honourable man. He does not give the name of the chemist; he gives no opportunity of investigating his assertions. He has detected poison in an article which is in daily use; he does not tell us that he has taken steps to stop its sale; he gives no one a chance to prosecute the offender. Probably, if injury should yet result, he might be charged as accessory to the fact. We have a full right to object to such indefinite accusations even from a B.A. and F.C.S.

Of all the evidence that has been adduced this is the only hint that chemists have sold the poison. Our readers will

appraise and value it as highly as they please. In the *Lancet* for June 8, another statement is made which, as it stands, is equally honourable. After saying that, as this case is still *sub judice*, "we refrain entirely from comment," and boasting, forsooth, that "the matter was brought under its notice before it found its way into the public papers," it goes on to say—"It would not surprise us to find that the 'violet powder' of commerce too generally, and many of the preparations sold as innocent for use in the toilet and the nursery, are at the present moment subjected to adulterations more or less mischievous, which do not fall into the category of 'accidents,' and have only the greed of gain for their excuse." When the great authority of the *Lancet* is considered, everyone will be at once convinced that it, above all other journals, should not make such insinuations without giving solid facts to support them.

THE MICROPHONE.

The discoveries which have recently delighted the scientific world have produced such palpable results that the public have been able to perceive something of their magnitude. But to a mind drilled in the elements of science their most striking feature is the immense field of knowledge that they open to us for the first time. One would have thought that the radiometer, the telephone and phonograph, the practical adoption of the electric light, the liquefaction of the last of the gases, the discovery of two or three new metals, would have reduced for a time the speed of scientific progress. But again are we startled by a discovery which, as Max Müller has recently taught us, brings the Infinite right home to our thoughts. Professor Hughes, the inventor of the type-printing telegraphic apparatus, has discovered that certain bodies are sensitive to sound in the same way as selenium is to light. The effect of this discovery is that the tramp of a fly on the table, the tick of a watch, the beat of the pulse, the delicate rubbing of a fine camel's-hair pencil on a piece of wood, can be made more audible to persons a hundred miles away than to those in the very room in which the sounds are produced.

In *Nature* for May 16 an account is given of experiments at which the writer was present, with a description of the apparatus presented to the Royal Society on May 9. The discovery was made during some experiments on the ordinary telephone to determine whether the known effect produced by stretched wires on the currents of electricity passing through them influenced the transmission of sound. In place of the metal disc in the mouthpiece a wire was introduced, stretched, and talked at. No sound was heard until a breaking strain was applied. At the moment of fracture the sound was transmitted, and it was soon found that the result was attained when one or more portions of the electrical conductor were separated and only brought into contact by a slight pressure. Thus, a pile of nails, a piece of steel watch chain, a heap of fine metallic filings, when made part of the circuit, were found to reproduce the words spoken to them. The best results were obtained when, in place of these, a piece of soft charcoal was used saturated—if the term may be used—with particles of a metal which was not affected by the air, such as mercury or platinum. The resistance of the conductors was affected by sounds perfectly inaudible, and this property is the one utilised in the form of instrument named the microphone. "When further developed by study we may fairly look to it to do for us with regard to faint sounds what the microscope does with matter too small for human vision." The paper read before the Royal Society is reprinted in the *Chemical News* for May 17, and from this source we learn that, if one person sings a song, the distant station, provided with a similar transmitter, can sing and speak at the same time, and the sounds will be received loud enough

for the person singing to follow the second speech or song sent from the distant end. A piece of willow charcoal the size of a pin's head is quite sufficient to reproduce articulate speech.

POMPOUS QUACKERY.

THE last-born periodical in the world of Pharmacy, the *Philadelphia Druggist and Chemist*, has distinguished itself by one of the most elaborate doctors' advertisements it has been our luck to see. Charles G. Polk, M.D., is the author of an article filling more than two-and-a-half pages on glycerite of vitalised hypophosphites. His concluding paragraph is as follows:—"Against the copyrighted secret nostrums of undermined (*sic*) or pretended composition I cannot too strongly caution the profession. They smack too strongly of quackery, and those which refer to a formula which has no existence add another fault to that of charlatanism." That paragraph follows a formula having among other ingredients "isolated nitrogenous hypophosphite of calcium," sodium, potassium, ammonium, magnesium, and iron, "hypophosphorous acid with glycerine." "Zoline—an alkaloidal hypophosphite composed of three parts of blended nitrogen and glycerine with one of hypophosphorous acid," and so on. The glycerite of vitalised hypophosphites is recommended for phthisis, impotence, decaying teeth, neuralgia, most constitutional diseases of pregnancy and lactation, pernicious anæmia, loss of memory, failure of brain and nerve power, general debility, indigestion, scrofula, and various cachexia. It is to be made by treating cows' brains and blood with certain solvents. The author asserts that he is in no manner concerned in the manufacture or sale of the nostrum, and is solely actuated by a desire for the good of the profession. We wish to draw no conclusions from the fact before us, but we certainly wish that information rather more definite had been given us on the properties and mode of separation of zoline, and the other ingredients.

ANALYSM.

THIS title, which we have had occasion to use more than once before, claims a position as a standing heading in our pages. We are quite sure our friends the public analysts will keep us supplied with items for it.

Last month, with all the kindness in the world, we pointed out an arithmetical error in the calculations of a no-doubt otherwise able analyst at Huddersfield. Our contemporary the *Analyst*, with assurance, at any rate, if not with faith, "presumes" that "Mr. Jarman has been misreported," and, on that presumption only, counsels him "to at once demand an apology for the paragraph." Reporters and analysts too are both liable to errors, we know, but the "presumption" of accuracy is surely in favour of the former.

Mr. Allen, of Sheffield, is not unknown in the records of analytical fame. There is scarcely any business which he has not taken in hand with the view of reforming. Chemists, grocers, milkmen, and millers, all take their turns. Like the Red Indian with his scalps, Mr. Allen would seem to pride himself on the number of convictions he can manage to secure. This passion he shares with many of his brethren of the analytic art, though one does not exactly see why a public analyst cannot fulfil his duty without seeking so hard to accumulate these trophies. Mr. Allen's appetite in this direction has more than once brought him to grief, and his latest exploit, while it does not reflect on his chemical skill, indicates an animus, and a lack of judgment if not of knowledge, which seriously affects his qualifications for the position he occupies. A sample of flour from some Selby millers had been brought to him, and he found a certain proportion of alumina in it. This was sufficient for him, and he at once concluded that alum had been mixed with the flour. On his certificate to this effect the millers were prosecuted. They

demanded a reference to Somerset House, and the chemists there, while confirming without much variation Mr. Allen's analysis as to the alumina, declined to say that this was at all sufficient proof of the admixture of alum. On their evidence the summons was dismissed. Mr. Allen, therefore, deprived of his scalp, proceeds, in the pages of the *Analyst*, to do what he can to discredit those who had contributed to this result. "The gentlemen occupying the position of chemists at Somerset House" is no doubt a humorous way of implying ignorance on the part of men to whom the analysis of food has been the occupation of years. Now it happens that Mr. Reynolds, of Leeds, some twenty years ago, was, we believe, the first to show that the flour from some kinds of wheat—Egyptian especially—was liable to contain an excessive proportion of alumina. "The method of harvesting"—Mr. Reynolds wrote, in the *Pharmaceutical Journal*, 1856-57, p. 558—"the plant being pulled up by the roots, and the grain trodden out by cattle—sufficiently accounts for the large quantity of soil intermixed, and this sometimes amounts to 25 per cent. of the total weight. As the grain is usually perforated by insects, the cavities resulting, and also the natural superficial depressions, are quite certain to retain a portion of aluminous earth after the washing which it usually undergoes." Mr. Reynolds's experiments were undertaken in connection with an important legal case, and his conclusions were fully confirmed by Dr. Letheby. Now mark the way in which Mr. Allen thinks it necessary to study the literature of a subject on which he is required to pronounce the opinion of an expert. In his letter to the *Analyst*, after alluding to the observations of "Dr. Dupré, Dr. Muter, Dr. Stevenson, Mr. Wanklyn, Mr. Wigner, and others," (all members of the same mutual admiration society) who "agree in finding a maximum less than that of Somerset House," Mr. Allen says, "a Mr. Reynolds, a druggist of Leeds, asserts that he found a considerable proportion of alumina in Egyptian wheat some fifteen years since. Without wasting time to criticise this statement," &c. This attempt to disparage by an assumption of contempt an opponent whose testimony it is otherwise awkward to deal with is a game which can only succeed in the congenial circle of the Society of Public Analysts. To others, who are better acquainted with the facts, it only proves that the author has yet to learn the literature of the subject he undertakes to teach, or else, that he wilfully and, it must be added, maliciously conceals his knowledge.



AND

Literary Notes.

Secret Remedies and World-wide Circulation.

OUR translation of Mr. Edward Hahn's collection of the "Formulae of Secret Medicines" is evidently thought to be very valuable to druggists. *New Remedies*, a popular trade journal in the United States, pays us the sincere compliment of regularly reprinting our translation, acknowledging its obligation to us. The *Canadian Pharmaceutical Journal* has also honoured us by reprinting selections, and the *Druggists' Advertiser*, of New York, also finds this valuable "copy." In the last-named instance case our claims do not seem to be recognised. On this side of the Atlantic the editor of "Cooley's Cyclopædia" is embodying the translation in the new edition of his work.

The Peregrinations of a Paragraph.

SOME months ago a paragraph appeared in the *Journal of Applied Science* stating that a couple of gills of sweet oil would neutralise the effects of every known poison. A statement at once so startling and important naturally attracted our attention, and we gave it a place in our Poison Cupboard, duly

acknowledging the source whence it was drawn. One of our brethren "across the ditch" borrowed it from us. Whether its English origin was acknowledged or not we forget, as such courtesies are occasionally reciprocal. After doing the "American tour" we find it again in England, in small type, among the Notices to Correspondents of the *Medical Press and Circular*, for May 15. It is thus introduced:—"It is stated in an American contemporary," &c. We are anxious that the editor of the *Journal of Applied Science* should enjoy the fruits of his labours, and so give this note to call the attention of all whom it may concern to their lawful debts. The *Students' Journal and Hospital Gazette* quotes this from the *Medical Press and Circular*, and adds: "The method is certainly worth remembering and trying." Can it be possible that this is meant seriously?

ON May 25 appeared the first number of the *Electrician*, a fourpenny weekly journal of Theoretical and Applied Electricity and Chemical Physics. The office is at 396 Strand, W.C.

IN the current number of the *New York Druggists' Advertiser* there are eight articles, varying in length from a dozen lines to three columns, all borrowed from the CHEMIST AND DRUGGIST, and only one acknowledged.

WE have received the fourth part of Cooley's "Cyclopædia," which reaches "Chlorine." The very thorough manner in which this work is being revised and the large mass of new material which is being introduced into its pages will make it, when complete, one of the most useful works in the English language.

A THIRD EDITION of the late Dr. Ruddock's "Diseases of Infants and Children and their Homœopathic and General Treatment" has been issued by the Homœopathic Publishing Company. Many foot-notes and alterations in the text have been made by Dr. George Wade. This is one of the most useful of Dr. Ruddock's several medical manuals, and contains many hints of sound hygienic value outside its homœopathy.

MESSRS. CHATTO & WINDUS have reprinted in facsimile the London Directory of 1677, or, as it entitles itself, "A Collection of the Names of the Merchants living in and about the City of London." The compiler was a certain Sam Leo, of Lombard Street, and he seems to have just set down in alphabetical order the names of such merchants as he could get at without any great amount of trouble. Several of the ancestors of our particular friends Smith and Jones were living at that time, but apart from the discovery of this curious fact, we do not know that there is much to be gathered from this reprint of a work which we imagine never was of much use, and can certainly be of none now.

THE intensely interesting study of the phenomena associated with the brain has now a literary organ exclusively to itself. The first number of "Brain: a Journal of Neurology," was published in April, and will be continued quarterly. Messrs. Macmillan are the publishers. To this first number Mr. Geo. Hy. Lewes contributes a remarkable article on "Motor Feelings and the Muscular Sense." The author argues that the artificial separation of "sensory" and "motor" nerves is leading us astray in regard to the properties of those, which are not sharply separated naturally. Dr. T. Clifford Allbutt contributes a serious warning in an article on "Brain Forcing." The writer urges that while the "quality" of the brain power in any given individual is independent of his education, yet that by undue forcing it may be overlaid. Other brain powers, as "quantity," "tension," "variety," and "control," he maintains, are to be influenced by wise training, but the first necessity, he seems to insist, is to avoid the error of over-forcing the brain until it is mature. The attempt to write a funny article by Mr. John Charles Bucknill is a lamentable failure. He is infected with that peculiar brain disease which makes some people believe that those must necessarily be lunatics who do not accept all their theories. Jonathan Hutchinson, Bevan Lewis, David Ferrier, W. R. Gowers, and Crochley Clapham are among the other authors of papers in this somewhat curious but very important publication.

We have the pleasure to acknowledge a small illustrated "Visitors' Guide to Buxton," from Mr. J. C. Thresh, the author, and the well-known pharmacist of that fashionable resort.

"PURE WATER FOR HOUSEHOLD PURPOSES" is the title of a small pamphlet issued by the Silicated Carbon Filter Company for circulation to the public. The scientific evidence in favour of these filters is overwhelmingly strong.

THE *Boston National Journal of Education* says: "Hon. John J. Palfrey, the historian, is 82 years old, and is still hale and hearty—a remarkable illustration of the life-extending influence of literary pursuits." Old Gaffer Tomkins is 83, goes to market every week, has confined his literary studies to his Bible and a weekly journal, and has fed pigs every day for 70 years. A remarkable illustration of the life-extending influence of pig tending.

NEW BOOKS.

- Asthma: its Pathology and Treatment. By J. B. Berkart. 8vo., pp. 260. Churchill .. 7/6
- Botany, Outlines of: Classification of Plants. By W. R. McNab. 18mo., pp. 204. (*London Science Class Books*.) Longmans .. 1/6
- The Carbon Process of Permanent Photography, and its Use in making Enlargements, &c. Paul E. Liesegang's Manual. Translated from the 6th (revised) German edit. by R. B. Marston. With illustrations. 8vo., pp. 146; sewed. Low .. 4/
- Corns and Bunions: their Causes and Cure. By C. M. Clarke. Post 8vo.; sewed. C. H. Clarke .. 1/
- Dictionary of Commercial Information. By E. T. Blakely. Small 8vo., pp. 492. Simpkin .. 4/6
- On Ear and Throat Diseases: Ear Disease in Childhood, Ear Disease and Life Assurance, certain peculiar Aural and Cerebral Symptoms, Diseases of the Tonsils and Uvula requiring Operation. L. Thomas' Essays. Post 8vo., pp. 114. Churchill .. 2/6
- Magnetism and Electricity. For School and Science Classes. By G. Porter. 18mo., pp. 56. (*Elementary Science Manuals*.) Muller .. 8/
- Medical Women: a Statement and an Argument. By C. West. 8vo. Churchill .. 1/
- Metallurgy: S. Jordan's Album to the Course of Lectures at the Central School of Arts and Manufactures of Paris. Royal 8vo. with 4to. Atlas of 140 Plates. Trübner .. 80/
- An Opium Eater: Notes from his Pocket Book, with Anecdotes, &c. By T. De Quincey. 12mo. sewed. Ward & Lock .. 1/
- Practical Chemistry for Medical Students, specially arranged for the First M.B. Course. By M. M. P. Mnir. 18mo. pp. 62. Macmillan .. 1/6
- Pulmonary Consumption: Three Lectures on its Pathology. By T. H. Green. Illustrated by 15 Wood Engravings. Post 8vo. pp. 102. Renshaw .. 5/
- Rabies or Hydrophobia: its Nature and Treatment. Being the Report of the Special Commission appointed by the *Medical Press and Circular*. With Valuable Additions. Post 8vo. pp. 290. Bailliere .. 5/
- J. Pollock's Notes on Rheumatism. 12mo., pp. 82, sewed. Churchill .. 2/6
- Rupture of the Female Perineum, Immediate and Remote, G. G. Bantock on its Treatment. With illustrations. 8vo., pp. 50. Churchill .. 3/6
- Telephone and Phonograph: a Popular Account. Square 12mo., pp. 48. Tegg .. 6/
- Telephones, How to Make Your Own, for 5/6 per pair, without Lathe or Tools, which require Skilled Labour. Cr. 8vo. J. Heywood .. 3/
- Harrison (R.)—Clinical Lectures on Stricture of the Urethra and other Disorders of the Urinary Organs. 8vo., pp. 194. Churchill .. 7/6
- Throat and its Diseases. By L. Brown. With 100 Typical Illustrations in Colour and 50 Wood Engravings. Royal 8vo., pp. 328. Bailliere .. 18/
- Hovell (D. de B.)—Vaccination, with a View to make it more Effective and free from Objection. 12mo., pp. 12, sewed. Simpkin .. 6/

NEW AMERICAN BOOKS.

- Annual Review of the Drug Trade of New York for the year 1877. Prepared by D. C. Robbins. New York, 1878.
- Baird (S. F.)—Annual Record of Science and Industry for 1877. 12mo. (New York) London: Sampson Low & Co. .. 10/
- Chemical Experimentation, being a hand-book of lecture experiments in Inorganic Chemistry, systematically arranged for the use of lecturers and teachers in chemistry, as well as for students in Normal Schools and Colleges and for private study. By Samuel P. Sadler, A.M., Ph.D., Assistant Professor of Chemistry in the University of Pennsylvania. Louisville: John P. Morton & Co. 8vo., pp. 225.

- Descriptive and Statistical History of Tobacco. By E. H. Gilmore. Washington, D. C., 1878 .. 25c.
- Dose and Price Labels of the Principal Articles of the Materia Medica and Preparations used in the United States, with some Useful Hints and Formulas, and with Prominent Marks calling attention to all Active and Poisonous Articles. For the use of Druggists, Pharmacists, and Physicians. By C. L. Lochman. C. L. Lochman and Haines and Worman, Allentown, Pa. 1877, pp. 96, 9 x 4 in.
- The Druggist's Hand-Book of Private Formulas, published by the editor, Mr. J. H. Nelson, Cleveland, Ohio ..
- Kershaw (J. M.)—Diseases of the Brain and Nervous System. Part 1: Facial Neuralgia and the Visceralgia, their Diagnosis and Treatment. 8vo. (St. Louis, Mo.), sewed. London: Sampson Low & Co. .. 2/6
- Norton (S. A.)—Elements of Chemistry. 12mo. (Cincinnati) London: Sampson Low & Co. .. 6/
- Schweigger.—Handbook of Ophthalmology. Translated by P. Farley. Illustrated. 8vo. (Philadelphia) London: Sampson Low & Co. .. 24/
- Prescription Writing: Designed for the Use of Medical Students who have never studied Latin. By Frederic Henry Gerrish, M.D., Professor of Materia Medica and Therapeutics in the Medical School of Maine, &c. Portland, Me.: Loring, Short & Herrman. Philadelphia: J. B. Lippincott & Co., 1878. Small 8vo., pp. 51.

CONTINENTAL WORKS.

- Werthbestimmung des Wismuths und des käuflichen Magisterium Bismuthi. Von Jul. Löwy. Dorpat.
- Sur la Composition des Cloportes. Par Dr. C. Méhu. Paris, 1878.
- Beiträge zur Ermittlung einiger Hopfen-Snrogate im Biere, von Wilhelm Meyke. An inaugural dissertation. Libau, 1878. Pp. 44, with tables. Privately published.
- Die Entstehungsgeschichte des Bernsteins, erläutert mit Hilfe von Beobachtungen an Copalpflanzen. Dorpat. Pp. 4.
- Rhabarberanalysen, von Dragendorff. Untersuchungen aus dem pharmaceutischen Institut in Dorpat. 8., pp. 13.
- Ein Beitrag zur Kenntniss der Mutterkorn-alkaloide. Von Theodore Blumherg. Dorpat, 1878. 8., pp. 45.
- Anleitung zur quantitativen chemischen Analyse. Von C. R. Fresenius. 6. Aufl. 2. Bd. 2. Lfg. 8. 1m. 80p. Fr. Vieweg und Sohn, Braunschweig.
- Flora von Deutschland. Von A. Gareke. 13. Auflage der Flora von Nord- und Mittel-Deutschland. 8. 3m. 50p. geb. 4m. Wiegand, Hempel n. Parey, Berlin.
- Tafeln zur qualitativen chemischen Analyse. Von W. Hampe. 2. Aufl. 8. 4m. geb. 4m. 50p. Grosse'sche Buchhandlung, Clausthal.
- Illustrirtes Lexikon der Verfälschungen der Nahrungsmittel und Getränke, etc. 2. Von H. Klencke. Aufl. 2. Lfg. 8. 1m. Weber, Leipzig.
- Ausführliches Lehrbuch der organischen Chemie. Von H. Kolbe. 3 Bd. 1. Abth., bearbeitet von E. von Meyer und A. Weddige. 9. n. 10. (Schluss.) Lfg. 8. 4m. 50p. Fr. Vieweg und Sohn, Braunschweig.
- Die Theerfarbstoffe, ihre Darstellung und Anwendung. Von St. Mierzinski. 8. 10m. O. Wigand, Leipzig.
- Müller-Pouillet's Lehrbuch der Physik und Meteorologie. 8. Aufl., bearbeitet v. L. Pfaunder. 2. Bd. 1. Abth. 8vo. 4m. fr. Vieweg und Sohn, Braunschweig.
- Leitfaden der Chemie, berechnet für den Untergrad in einem halbjährigen Course. Von C. Wasserburger. 8. 75p. Kühkopf's Buchhandlung, Kornhuben.
- Chemisch-technisches Repertorium. Uebersichtlich geordnete Mittheilungen der neuesten Erfindungen, Fortschritte und Verbesserungen auf dem Gebiete der technischen und industriellen Chemie. Von E. Jakobson. 1876. 8. 14m. Gärtner, Berlin.
- Ueber die Citramalsäure. Von Th. Morawski. 8. In Comm. 25p. C. Gerold's Sohn, Wien.
- Die Conservirung von Wein und Most und die Anwendung der Salicylsäure in der Kellerwirthschaft. Von A. dal Piaz. 8. 1m. 20p. A. Hartleben, Wien.
- Die Colorie der Baumwolle auf Garne und Gewebe mit besonderer Berücksichtigung der Türkischroth-Färberei. Von C. Roman. 8. 4m. A. Hartleben's Verlag, Wien.
- Schlichting's chemische Versuche. 6. Aufl. 2m. 60p. Ernst Homann, Kiel.
- Kurzgefasstes Lehrbuch der Chemie und chemischen Technologie. Von K. Stammer. 3. Aufl. 8. 2m. 80p. geh. 3m. 20p. Budeker, Essen.
- Einleitung in die anorganische Chemie. Von A. Pinner. 8vo. 1m. Oppenheim, Berlin.
- Botanischer Congress (Antheilung Chinarinden) und Ausstellung pharmaceutisch wichtiger Pflanzenprodukte zu Amsterdam, im April, 1877. Von Prof. Ed. Schaer in Zürich. 1p. 21. 1878.
- Chemische Beiträge zur Pomologie, mit Berücksichtigung der livländischen Obstcultiv. Von Dr. G. Dragendorff. Dorpat, 1878. 8. pp. 102.
- Medicinalen Specialitäten. Eine Sammlung aller bis jetzt bekannten und untersuchten medicinischen Geheimmittel mit Angabe ihrer Zusammensetzung nach den bewährtesten Chemikern. Gruppenweise zusammengestellt von C. F. Capann-Karlowa Apotheker. 18 bogen 2m. 50p. A. Hartleben's Verlag, Wien, Pest und Leipzig.

Medical Gleanings.

MORRIS & CO.'S "ANODYNE AMYLOID COLLOID."—Mr. Met-Jones, of Lancaster, has written to the *Medical Times and Gazette* recommending, in the highest terms, the use of this "strum" in cases of neuralgia. He mentions five cases in which it has been tried with almost magical effects in the removal of pain.

BROMIKE.—A new remedy for diarrhoea in man and animals said to have been discovered in New Zealand, where it has been in use among the Maoris. It consists in a decoction made by pouring boiling water on the green leaves of a shrub called "Roromike" by the natives. The liquid, though slightly bitter, is said to be not unpleasant to the taste. It is asserted that two doses of this decoction will always effect a cure even in the most obstinate cases.—*Nature*.

NEW USE FOR LINSEED.—Calcutta flaxseed, as a substitute for cod-liver oil in skin diseases originating in, or attended by, scurvy, is commended by Dr. Sherwell, of Brooklyn, N. Y. Flaxseed is preferable, to be chewed from time to time; it is said to carry an ounce or more in the pocket. In this case some patients will use several ounces a day, greatly to the improvement of their nutrition. This seed is not unpleasant, and causes no eructations or intestinal disturbance.

RESUSCITATION OF THE APPARENTLY DROWNED.—Lambton Rogers, Esq., Secretary to the Royal Humane Society, 4 Trafalgar Square, has written to the Royal Medical and Chirurgical Society requesting it to reappoint a committee which sat in 1877 to inquire into the various methods of resuscitating the apparently drowned. It is desired that the society should carefully examine and report upon the method recently brought before the English public by Dr. B. Howard of New York. In response to this request, the following committee has been appointed:—Professors Lister, Burdon, Sanderson, and Curnow; Sir Sieveking, Lauder, Brunton, Audrew, Ralf, John Williams, George Harley.

AMERICAN DOCTORS.—These vary, as might be expected, but it is certain that some of the varieties run rather rough. For example, the State Board of Health of Illinois proposed to give certificates to all doctors who had been in practice for a certain number of years in view of official appointments. The following (says the *Chicago Medical Times*) is a sample of many letters received from the "learned" profession:—

" Ill. (No date.)

H. RanCh dir Sir

I Sent that affidavit to you and haent herd from it I want one dollar in the Sam hav yon got and Was it Write if it is not Write it me no and I Will make it Write I practice on the electric Mode

Upon being informed that applicants for certificates of ten years' practice were required to furnish evidence of good moral character, &c., he sent the following:—

" Ill., Feb. 1, 1878.

John H. Ranch M. D.

With regard to Dr. as far as I am concerned he has given entire satisfaction to all who have known him well Respected and has a good Moral Character and has Conducted himself in Every Respect as a Gentleman since he has been in the State of Illinois. Dr. has Practised Medicine in the same Parts for anumber of years and is your very Respectfully

— a Justice of the Peace —

The raw material from which this learned profession is manufactured seems to be somewhat responsible for such results as have been given, if we may judge from some remarks of a medical author which occur in the same number of the journal from which we have already quoted. He is urging the importance of preliminary examination in English, Latin, &c., and he illustrates the necessity of such by a few samples selected at random from the graduates' papers. "One tells of *justation*, and another of the *coxsix*, and another of *synthyxis*, and another of the *menoise*, and another rubbing his empty skull calls it *alic*, and to crown the whole another says this is *siens*."

ALCOHOL AT ST. THOMAS'S HOSPITAL.—From the annual statement of the receipts and payments of St. Thomas's Hospital, it appears that in 1877 512*l.* 16*s.* 1*d.* was paid for porter, 480*l.* 18*s.* 6*d.* for wine, and 407*l.* 10*s.* 4*d.* for spirits, making a total of 1,401*l.* 4*s.* 11*d.*

ALCOHOL AT THE MEDICAL SOCIETY OF LONDON.—Dr. Alfred Carpenter being appointed to deliver the annual oration before this society, chose as his subject "Alcoholic Drinks: as Diet, as Medicines, and as Poisons." In the course of it he said: "We may fairly assume that there are occasions in which stimulants may be useful and even necessary; but as habitual drinkers they must be hurtful, unless more diluted than we are accustomed to take them; and it appears to be our duty as medical advisers to forcibly state this fact to those consulting us, and to advise their non-use in daily life." Again: "In concluding my subject, I have only to remark that alcohol, in any of its forms, may be a good medicine, but it is a bad diet, and that its action as a poison is visible among all ranks of society. It is our duty as medical men to advise our patients accordingly." Is the large amount of alcoholic liquors consumed at St. Thomas's Hospital used as a medicine, a diet, or a poison?



MANDER BROTHERS' EXHIBIT AT PARIS.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

DEAR SIR,—We feel sure you will allow us to correct that which was conveyed in your last number in reference to the accident which befel our case at the Paris Exhibition.

In reference to this accident you remark that "it is likely to end in a law suit between Messrs. Mander and Mr. Sage, the maker of the case."

In justice to the latter gentleman it is only fair to say that the honourable way in which he behaved entirely removed such a necessity. Not only did he engage to make a new case, free of cost to ourselves, but he also consented to reimburse us a portion of the loss sustained by injury to the contents of the case.

While writing, we may say that we hope to have our new case in its place in a complete form by June 1.

We are, dear sir, your truly,

MANDER BROTHERS.

A CONTRADICTION.—RE WILTON & CO.'S ESTATE

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—In the statement of the failure of Frank Wilton & Co. in your last issue, I was surprised to find my name in the list of debtors for the sum of 120*l.* 5*s.*

I will esteem it a favour if you will, in your next issue, allow me to contradict it.

The only transaction I had with F. Wilton & Co. was for a parcel of Eau de Cologne on February 14, 1878, amounting to 19*l.* 5*s.*, and this was paid for on April 20 (less discount), which fact is proved by letter enclosed from the receiver, Mr. R. Rabbidge, which I will thank you to return.

Yours faithfully,

J. H. PEARSON.

Market Place, Peterborough,
May 22, 1878.

METHYLATED CHLOROFORM.

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

SIR,—In a paper by Mr. A. H. Mason, on chloroform, published at page 202 of the May issue of your journal, we notice the assertion that "when purified, no one can possibly tell the origin of the chloroform." We are somewhat doubtful as to

what Mr. Mason may mean by "chloroform when purified," and of course we are quite willing to admit that chloroform from any source could be so purified that it would be impossible to discover from what it was made. As to commercial samples of "pure" and methylated" chloroform, however, we would undertake to discriminate easily and certainly between them.

Our test is a very simple one, and consists in pouring, in successive portions, about half an ounce of the sample on three or four folds of cloth or filter paper, and allowing three fourths or more to evaporate. With "pure" chloroform the residue has no unpleasant odour, but with "methylated" the peculiar smell of methylated spirit can be detected with the greatest ease.

As to the possibility of recognising chloroform made from acetone in a similar manner we have no experience; also, we are not aware if there be any difference in the physiological action of "pure" and "methylated" chloroform. We merely assert our ability to discriminate between the "pure" and "methylated" article by a simple test.

DUNN & Co.

"A CHEMIST CHARGED WITH MANSLAUGHTER."

POISONOUS POWDERS! ARSENIC IN POWDERS!! POISONOUS
VIOLET POWDER!!!
Thirteen Persons Poisoned."

TO THE EDITOR OF "THE CHEMIST AND DRUGGIST."

DEAR SIR,—Such were the prominent lines on the newspaper placards here and, doubtless, elsewhere, a few days since. These notifications must prove prejudicial to the interests of chemists and druggists generally, unless they take means to correct the erroneous inferences that would be drawn by the public from them. I trust, therefore, many of your readers have made use of the authentic information contained in your May issue, "that the offender is not a registered chemist and druggist," and have taken means to controvert the statement.

Faithfully yours,

CHARLES SYMES.

Liverpool, June 5, 1878.

Pharmacy Abroad.

AMERICA.

PHILADELPHIA DRUGGISTS.

THE Pharmaceutical Board of Philadelphia have made their annual report to the Mayor. Sixty-nine licenses were issued to clerks, and seventy-seven to retail drug dealers. The total number of drug stores is 692, with 397 qualified assistants.

AN EDUCATION SCHEME.

At a meeting of the Board of Trustees of the Philadelphia College of Pharmacy recently, it was decided to inaugurate an entirely new system of instruction. Hereafter there will be a junior and senior course, instead of one and the same course for all students. The junior student will have to pass an examination in all the branches before he can enter the senior class, and the instruction given to the senior class will include a wider range of scientific subjects than it has been possible to give heretofore. The new system will go into effect in the session commencing in October next.

CHILI.

THERE has been a great commotion among the apothecaries in Santiago lately, owing to the energetic measures adopted by the commission of inspection, who have ordered the closure of ten or twelve, in consequence of the person in charge not being legally qualified. Some years ago a law was passed, granting a long term to the owners of drug stores to prepare themselves for examination, after which unlicensed apothecaries would not be permitted. On one pretext or other, this term has been extended several times, but now there seems a probability that the law will be strictly carried into effect—to the great indignation of the unlicensed.



INDELIBLE INK STAINS may be removed by a solution of corrosive sublimate.

PHOTOGRAPHING IN COLOURS is said to be now practised successfully by M. Joseph Albert, photographer to the Court of Vienna.

THE death of the widow of Hahnemann, the founder of homoeopathy, at the age of seventy-eight, is announced. She died at her house in the Rue de Faubourg St. Honoré, Paris, which had for a long time been her residence.

PEPSINE FROM THE OSTRICH'S STOMACH.—According to the *Revue des Deux Mondes*, the ostrich hunters of South America bearing in mind the almost incredible digestive powers of the bird, extract the pepsine from its stomach, and sell it for its weight in gold to dyspeptics.

TO KEEP RATS FROM HARNESS.—It is said that if a teaspoonful of Cayenne pepper be mixed in a quart of oil, and the harness be rubbed with it, the rats will let it alone. An addition of aloes to the oil, in the proportion of an ounce to a gallon, will answer the same purpose.—*Boston Journal of Chemistry.*

SODA MINT—A POPULAR AMERICAN REMEDY FOR NAUSEA AND WIND:—

	Parts.
Sodæ bicarb. ..	1
Aq. menth. pip. ..	16
Spt. ammon. arom. ..	2

M. Dose, a tablespoonful.

A DENTAL DISCOVERY.—Dr. Weil, of Munich, announces that he can stop teeth in a better manner than most other persons. His method is to extract the tooth, clean, and fill it, and then refix it in the socket. We heartily approve of the system, and suggest that the Government should offer a few Victoria crosses to such patients as are willing to lend themselves to the experiment.

ELECTROPLATING WITH BISMUTH.—Copper or brass may be plated with bismuth in a bath composed of 25 or 30 grammes of ammoniacal chloride of bismuth per litre of water slightly acidulated with hydrochloric acid, operated cold. If heated to 100°, the bismuth will not deposit. By substituting the double chloride of antimony and ammonium, antimony may be similarly deposited.

A PROVISION OF NATURE.—A bright young man once asked by his sweetheart why the continual flow of so many rivers into the sea did not fill up the sea and make it run over. He replied—"Why, it's the sponges, my dear." "What have the sponges to do with it?" she asked. To which he responded—"Why, the sea is full of sponges, 'way down at the bottom. They suck up the water—don't you see?" She thought she did.

VALUE OF A WASTE PRODUCT.—The Bradford Corporation have accepted the tender of Mr. Steuart, of Manchester, offering 10,359*l.* per annum for seven years for the ammoniacal liquor produced at the Bradford Gasworks during that period from July 1. There were several tenders, the highest being 10,600*l.* The price paid under the expiring contract has been 800*l.* per annum during the past ten years. The holder of this contract was among the competitors for the new contract, and his tender was not 800*l.* a year, but 8,000*l.* a year! The discovery in the liquor of a certain chemical substance used in aniline dyes has greatly enhanced its value.

Mr. DOUGLAS, F.L.S., states that the manufacture of attar and rose-water in India is now chiefly confined to the banks of the Ganges. Ghazee-pore is the chief seat of manufacture, and Benares the principal mart. The highest prices ever fetched by Indian attar of rose were in the year after the Mutiny, when best attar sold at Benares at £10 the *tola* of 144 troy grains. The ordinary value is £4 to £5. The price of the best Ghazee-pore rose-water is now 1*s.* 6*d.* to 2*s.* per lb. Dark-red varieties, *R. indica*, *R. centifolia*, are preferred.—*Perfumery Gazette.*

WILL of Mr. Bartlett Hooper, late of 43 King William London Bridge, chemist, who died on April 6, was on the 28th ult., by Mrs. Eliza Hooper, the widow, and Leonard Hooper, the nephew, the acting executors, the personal estate being sworn under 9,000*l.* The testator gives, this, and devises all his real and personal estate to his son, and he earnestly requests her not to re-marry.—*City Press*.

PURA THIELEMANNI—THIELMAN'S CHOLERA DROPS.—Ph.

	Parts.
Ol. menth. pip.	3
Alcohol foot.	25
Chloroform purif.	2
Dissolve and add—	
Tr. opii	10
Vin. ipecac.	25
Tr. valer.	40

Take a teaspoonful for adults.—*Philadelphia Druggist and Chemist*.

NEWCASTLE HERBALIST'S WILL.—The case of Barnfather v. which has just been before Sir J. Hannen at the Probate Court, furnishes us with some idea of the extent and profit of the herbalist's trade in the North. The will in dispute, which related to the disposition of property amounting to upwards of £10,000, was contested by the wife on the ground of the alleged incapacity of the testator, induced by intemperate habits. The property had been accumulated principally by the father of the testator, who for many years enjoyed an extensive and lucrative trade as a herbalist amongst the pitmen and agricultural classes of the North.—*Sanitary Record*.

CHLORIDE OF POTASSIUM FOR SHEEP.—The use of chloride of potassium is recommended in Germany as a means of increasing the growth of wool in sheep. The fact of the "yolk" of sheep containing a large proportion of this chemical led some German chemists to make experiments with a view of proving whether the application of this material would promote the growth of wool; the result has proved that, by administering chloride of potassium in the proportion of one part of chloride to nine parts of salt, the production of wool may be increased and its quality improved, while the general health of the animals is at the same time benefited. Experiments are being made in order to ascertain the proper quantities to administer.

Obituary.

WM. BAKER, SHEFFIELD.—We alluded last month to the painful accident which Mr. Baker, analytical chemist, Sheffield, had met with in falling from the top of the stairs of his house in that town and fracturing his skull. The deceased man lingered for more than five weeks, and during most of that time was conscious. The best medical skill was devoted to his case, but it was unavailing, and he died on the 6th inst.

Mr. Baker was about 47 or 48 years of age. The son of a chemist in London, he studied science at the Royal School of Chemistry under the Rev. Dr. Percy. In 1854 he went to Sheffield, to engage in the service of Messrs. Rawson, Barker & Co., Royd's as analytical chemist and manager. With that firm he remained fifteen or sixteen years. He then commenced practice on his own account as an analytical chemist. His work as an analytical chemist included an investigation into the vexed question of the presence of nitrogen in steel, which investigation he undertook in conjunction with Mr. Graham Stuart. Recently he carried out a series of very elaborate experiments with the view of endeavouring to remove phosphorus from steel by the action of chlorine and other gases. An assistant in his profession, he was the author of several patents relating more or less connected with chemistry, some of which were said to be of no small value. He was the first to discover the fact that what is known as the Pattinson process of purifying lead from silver also effected the removal of copper and other foreign substances; and by the application of this principle he succeeded in gradually increasing the quality and value of the red and white lead manufactured by Messrs. Rawson, Barker & Co. During the fifteen years he was with that firm he devoted special attention to lead, and many of the results of his observations and experiments are recorded in *Watts's Metallurgy*. He was the borough analyst of Barnsley as well as of Rotherham; lecturer on toxicology at the Leeds School of Medicine; and at the Collegiate School

where he was immensely popular with the boys, he was, until very recently, the chemical lecturer.

Mr. Baker was married, and leaves a widow and a son. The latter had but just entered his father's laboratory as a student.

HUNTER.—On May 23, 1878, Mr. James Hunter, chemist and druggist, Westgate, Dewsbury, aged 55 years.

Mr. Hunter came from the North of England to Dewsbury thirty-eight years ago, and served an apprenticeship of six years in the shop now occupied by Mr. Robinson, chemist, Westgate, Dewsbury. At the expiration of his apprenticeship he obtained a situation in an establishment in Bower Street, Liverpool, which he held for five years, when he returned to Dewsbury and commenced business on his own account in a shop at the top of Church Street, in which he remained till he built his premises in Westgate and Union Street, where he carried on business until the time of his death. He was for several years president of the Dewsbury and District Chemists' Association, a society numbering over thirty members, and originated by himself and Mr. Robinson for mutual improvement and various objects connected with the trade. He was at one period a member of the Dewsbury Town Council. One of his great pleasures was fishing, of which he was passionately fond. He was also fond of skating, and was considered one of the best skaters in Dewsbury. He was the proprietor of the well-known Vermin Destroyer bearing his name. He died unmarried.

DR. JEPHSON.—Perhaps no provincial physician has ever attained such eminence as the late Dr. Henry Jephson, of Leamington, who died last month, in his eightieth year. He was a man of singular force of character, and ruled his patients with a sort of magnetic power. Added to this he had great faith in a simple form of diet, and it was possibly his rigid insistence on hygienic details which gave him his great success with a class of patients who could well afford to pay him. In the height of his popularity it is stated on trustworthy authority, Dr. Jephson made over 20,000*l.* a-year, and naturally all Leamington shared his prosperity, for his fame brought to that focus wealthy invalids from all parts of Europe and America. They came to consult him, and at his bidding they stayed to drink the Leamington waters. In his early days Dr. Jephson had a great fondness for chemical investigations, a memento of which he always retained, or, we should rather say, he always missed, for in some youthful experiments with fulminating silver he managed to blow off the first and second fingers of his right hand. At the age of fifty he lost his sight, a result probably of his intense nervous energy; for the last thirty years, therefore, he has lived in honoured retirement, bearing his severe affliction with courageous patience. The popular pleasure-grounds of Leamington were named after him, and this town will long and gratefully cherish his memory.

Trade Notes.

ADVERTISING FIRMS are requested to observe that, by special permission of the Post Office authorities, we are prepared to stitch up with our next issue, circulars, trade lists, &c., provided these are printed on pages of the same size as our own. A circulation of ten thousand will be guaranteed. This is by far the cheapest and most effective means of sending a circular to the trade in Great Britain and the Colonies.

* *

THE STEREOSCOPIC COMPANY, in Cheapside, have a phonograph on exhibition. The owners charge 1*s.* for the opportunity of testing its astonishing powers.

* *

MR. H. YOUNG, the maker of the well-known corn plasters which bear his name, has removed from Carthusian Street to 37 Wilderness Row, Goswell Road.

* *

MESSRS. NEWBURY & SONS are now manufacturing the well-known Berdoo's perfumes, and judging from a sample recently sent to us, the quality of this highly-esteemed brand is not likely to be depreciated at all in their hands.

MICROPHONES, with excellent powers, are being sold at very moderate prices by Messrs M. Jackson & Co., of Barbican. We have found these instruments very delicate in the transmission of sound. The same firm advertises some new and very powerful sound instrument to be ready shortly.

* *

OZOKERINE.—We notice from an advertisement on another page that Messrs. Corbyn, Stacey, & Co. are introducing a new basis for ointment under the name of Ozokerine, manufactured by Messrs. J. C. & J. Field. It is claimed that this cannot become rancid, and has, therefore, special advantages. We shall obtain some and report on it next month.

* *

THE Liebig's Extract of Meat Company has issued a very favourable report. With a share capital of 360,000*l.*, in 18,000 20*l.* shares, the year's business leaves a profit of 76,055*l.* 6*s.* 1*d.* for distribution. This has been thus disposed of: a 6 per cent. dividend and a 4 per cent. bonus, absorbing 36,000*l.*; 25,000*l.* carried to reserve fund; 5,620*l.* carried forward, and the rest, about 9,500*l.* paid as percentages to managers, directors, &c.

* *

WALKER'S EXTRACT OF TEA.—This preparation, as well as an extract of coffee, is prepared by Messrs. Walker and McLetchie, of George Lane, Botolph Lane, and both are very excellent in regard to aroma. The extract of tea is the greater novelty of the two, and we believe this is the first time that such a preparation has been offered. The addition of two or three teaspoonfuls of either to a cupful of boiling water yields a cup of tea or coffee which can hardly be surpassed.

* *

NOW THAT GROCERS are going into the patent medicine trade on such a large scale, chemists can only hold their own by retaliating in a more energetic manner than they have yet done. A very respectable firm, Messrs. Walker & Dalrymple, whose advertisement appears on another page, offer a good agency which many chemists might advantageously adopt. Their specialty is a fine tea, the only fault of which is that the leaves are broken. The tea is none the worse, but it is a good deal cheaper, and when we mention that it can be sold retail in packets at 20*d.* per pound, it will be seen that it is likely to be saleable.

* *

MESSRS. ALFRED BIRD & SONS, of Birmingham, who are probably the largest makers of violet powder in Great Britain, have requested Professor Redwood to collect from various London wholesale druggists samples of the powders bearing their trade mark—a steamer over a globe—and submit them to analysis. Dr. Redwood certifies that these (violet powder and fuller's earth) contain no trace of arsenic or of anything injurious to the skin.

Since writing the above we have received advertisement from Mr. W. Mather, Messrs. Lynch & Co., and Messrs. Bourne & Taylor, guaranteeing the purity of the violet powder supplied by them.

* *

CARR'S LIME FRUIT JUICE BISCUITS.—The lime fruit juice has never been presented in a more agreeable or useful form than in the "Lime Fruit Juice Biscuits," prepared by Messrs. Carr & Co., of Carlisle. They are prepared from Montserrat lime juice by a process patented by Mr. Campbell Morfit, and contain an equivalent of 40 per cent. of juice, the water only being eliminated. The flavour is admirably preserved, and it can hardly be doubted that these biscuits will serve to bring the valuable anti-scorbutic and blood-purifying virtues of the lime juice into more general use. They are sold in tins gaily and attractively labelled.

FIRE AT MESSRS. MAY & BAKER'S.—At three o'clock on the morning of the 12th instant a fire occurred at the works of Messrs. May & Baker, manufacturing chemists, Garden Wharf, Battersea, adjoining the extensive premises of the Patent Plumbago Crucible Company. The fire originated in the camphor refinery, where it blazed furiously for some time, as the efforts of the fire brigades were at first of no avail on account of the scarcity of water. For almost an hour after their arrival it was impossible to procure any water at all from the Water Company's mains. When this difficulty was at last overcome the employes of the firm used the appliances provided with great effect, and with the assistance of the Patent Plumbago Crucible Company's brigade in addition to the regular firemen the fire was brought under at five o'clock. The extensive camphor refinery and the gallic and pyrogallie acid factories were much damaged by the fire, but the large resources of the firm will enable them to proceed almost directly with the manufacture of these articles.

* *

MESSRS. DAVENPORT & Co., of Holborn, have purchased the sole right in Horner's Patent Nozzle and Stopper for Aërated Waters; they are introducing improvements in them, and will also lower the price. The special feature of this stopper is that it can be applied to any bottle. The stoppers are made



of glass or earthenware, and the nozzle is of tin, nickel-plated. The fitting of the nozzles to the bottles is readily accomplished, and the advantage of being able to use them again if the bottles break is very considerable.



[The following list has been compiled expressly for THE CHEMIST AND DRUGGIST by G. F. Redfern, Patent Agent, successor to L. de Fontaine-mereau & Co., 4 South Street, Finsbury, London; and at Paris and Brussels.]

Applications for Letters Patent :—

Acid Receptacles.—No. 1800.—J. Holden, of Manchester. Improvements in receptacles or apparatus for containing, storing, and transporting acids and fermented, aerated, and other liquids and fluids. Dated May 4, 1878.

Alum, &c.—No. 2112.—W. Jones.—A communication from H. F. Bangert, of Beuel, Germany. Improvements in the utilisation of blast furnace slag rich in alumina, and in the manufacture of alum and by-products. Dated May 27, 1877.

Ammonia.—No. 2048.—H. Aydon, of Whitton, near Hennessy, civil engineer. Improvements in manufacturing ice and cooling air for ventilation and other purposes, in producing anhydrous liquid ammonia, either from crude material or from a saturated solution of NH_3 , and apparatus for these purposes. Dated May 22, 1878.

Bottle Corking Apparatus.—No. 2080.—W. A. Barlow.—A communication from J. Jacob, of Brussels, Belgium. Improvements in corking bottles, and in apparatus therefore. Dated May 24, 1878.

Bandages.—No. 2134.—C. B. Loughnan, of the Elms, Wakefield, Yorkshire. The improvement in the preparation of surgical bandages known as "Sayre's bandages." Dated May 29, 1878.

er Tablets.—No. 2217.—W. R. Lake.—A communication from V. F. Simes, of Philadelphia, Penn., United States, druggist. Improvements in the manufacture of tablets, cakes, or blocks of amorph. Dated June 3, 1878.

Foods.—No. 1933.—A. W. Clark.—A communication from J. Barthe, of Paris. Improvements in horse and cattle foods. Dated May 14, 1878.

ate of Soda.—No. 2130.—S. Pitt.—A communication from T. Schloosing, of 67 Quai d'Orsay, Paris. Improvements in the manufacture of carbonate of soda by the ammonia process. Dated May 28, 1878.

Alkalies.—No. 2203.—E. W. Parnell & J. Simpson, both of Liverpool, manufacturing chemists. Improvements in the manufacture of caustic alkalies, and in apparatus or appliances employed herein. Dated June 1, 1878.

agne Taps. &c.—No. 1804.—S. Grafton, of 26 Regent Place, Birmingham, manufacturer. Improvements in taps for discharging champagne and other fluids from bottles and other vessels. Dated May 6, 1878.

al Thermometers.—No. 1879.—L. Peroni, of 45 Hatton Garden, Holborn, glass-blower. Improvements in the construction and formation of glass tubes employed in the manufacture of clinical and other thermometers, with the view of increasing the facility of reading the indications of mercury employed therein, as well as for other useful purposes in connection therewith. Dated May 10, 1878.

Foot-rot.—No. 2189.—F. W. Dallimore, of 26 Budge Row, Cannon Street, London, Australian squatter. For the purpose of curing and preventing the disease in sheep called foot-rot. Dated May 31, 1878.

aying Sewer Gases.—No. 2213.—Elizabeth J. Corbett, of San Francisco, Cal., United States, physician. Improvements in devices for removing gases from sewers and destroying them by heat. Dated June 3, 1878.

ectants.—No. 2057.—H. L. Jones, of Brewster's Hotel, Ely Place, Holborn, London, civil engineer. Improvements in solid and liquid disinfectants and deodorisers. Dated May 23, 1878.

—No. 1976.—E. Tust, of Barmen, Germany. The preparation of dye stuffs from trichloride of benzole. Dated May 16, 1878.

a Syringes.—No. 2067.—J. Banks, of 7 to 12 Aldersgate Street, London. Improvements in enema syringes. Dated May 23, 1878.

enting Solutions.—No. 2052.—C. Graham, of University College, London, professor of chemical technology. Improvements in effecting the fermentation of solutions capable of yielding alcohol. Dated May 23, 1878.

Press.—No. 1957.—H. E. Newton.—A communication from A. L. G. Dehne, of Halle-on-Saal, Germany. An improved arrangement or construction of filter press for the more perfect lixiviation or washing of the cakes of solid matter formed in the filtering chambers. Dated May 15, 1878.

—No. 1958.—H. E. Newton.—A communication from A. L. G. Dehne, of Halle-on-Saal, Germany. Improvements in filtering apparatus. Dated May 15, 1878.

Presses.—No. 2043.—W. Freakley, of Longton, Staffordshire, engineer. Improvements in filter presses. Dated May 22, 1878.

rating Vapours.—No. 2195.—G. Roby, of Wigan, Lancashire. Improvements in and appertaining to apparatus for generating and inhaling oxygen and medical vapours. Dated June 1, 1878.

ate of Ammonia.—No. 2224.—W. Gentles, of Saint Helen's, Lancashire, analytical chemist. Improvements in the manufacture of muriate of ammonia. Dated June 3, 1878.

—No. 2056.—R. H. Hutchinson, of Blackburn, cotton manufacturer. A new or improved oil or lubricant. Dated May 23, 1878.

phoric Acid, &c.—No. 2182.—F. Wirth.—A communication from C. Müller and A. Packard, of Wetzlar, Germany. Improvements in the method of and apparatus for manufacturing phosphoric acid and superphosphates. Dated May 31, 1878.

phate of Potassa.—F. Wirth.—A communication from A. Clemm, Doctor of Philosophy, of Mannheim, Germany. Improvements in the method of manufactring phosphate of potassa or phosphate of soda. Dated June 3, 1878.

stering Taps.—No. 1787.—E. R. Corrie, of Epsom, Surrey. Improvements in taps or cocks for registering and measuring wines or other fluids. Dated May 3, 1878.

rators.—No. 1831.—J. R. Chislett, of Plymouth, Devonshire. Improvements in the construction of respirators. Dated May 7, 1878.

ers.—No. 1853.—R. J. Smlth, of Manchester. Improvements in closing or stoppering glass and other bottles, and in tools for making the same. Dated May 8, 1878.

ers.—No. 1929.—W. R. Lake.—A communication from C. O. Hammer, of Pittsburgh, Penn., United States. Improvements in bottle stoppers. Dated May 14, 1878.

ers.—No. 2064.—J. P. Simms, of Manchester. Improvements in stoppering glass and other bottles. Dated May 23, 1878.

Stoppers.—No. 2166.—J. Taylor, of Oakworth, near Keighley, Yorkshire. Improvements in stoppers for bottles containing aerated or other liquids. Dated May 30, 1878.

Sulphate of Lime.—No. 1874.—F. J. Cheesbrough.—A communication from C. T. Tomkins, of New York, United States. An improved form of sulphate of lime, and a special process for the preparation of the same, to be used as an element in the composition of paper and the finishing of cotton goods, and as a substitute for terra alba, clay, and other substances now employed in the manufacture of paper and other goods. Dated May 9, 1878.

Taking Impressions of the Mouth.—No. 1833.—M. E. Toomey, of Rathbone Place, London. Improved means for taking impressions of the mouth for dental purposes. Dated May 7, 1878.

Vaginal Injector.—No. 2055.—H. A. Dufrené.—A communication from A. Audown, of 69 Rue de Lille, Angoulême, France. An improved apparatus for vaginal injections. Dated May 23, 1878.

Was hing-lye.—No. 1899.—A. C. Henderson.—A communication from C. M. Lévy and G. Alexandre, chemical manufacturers, of Paris. An improved solid lye for washing and bleaching linen. Dated May 11, 1878.

Letters Patent have been issued for the following:—

Bottle-filling Machine.—No. 4168.—F. Clarke, of Canterbury, Kent, engineer. Improvements in machinery for filling and corking bottles and other vessels. Dated November 8, 1877.

Bottling Machine.—No. 1307.—L. Rose, of 11 Curtain Road, Finsbury, London, lime juice merchant. An improved bottling machine for aerated waters. Dated April 3, 1878.

Bottling Machine.—No. 4659.—E. Breffit, of London, merchant. Improvements in apparatus for charging or filling bottles with aerated liquids. Dated December 8, 1877.

Bottles and Stoppers.—No. 4660.—E. Breffit, of London, and J. Edwards, of Castleford, Yorkshire. Improvements in the manufacture of glass bottles, jars, and other receptacles, and in the means or apparatus employed therein, and for stopping bottles for aerated or other liquids. Dated December 8, 1877.

Cyanogen Products.—No. 314.—W. V. Wilson, of Jubilee Street, Mile End, colour manufacturer. Improvements in the manufacture of cyanogen products from gas residues. Dated January 24, 1878.

Colouring Matters.—No. 828.—C. D. Abel, a communication from the Actien Gesellschaft fuer Anilin Fabrikation, of Berlin, Germany. The production of new colouring matter, for dyeing and printing. Dated March 1, 1878.

Curative Compound, &c.—No. 4636.—J. Jeyes, of Plaistow, Essex, analytical chemist. An improved compound for preservative, antiseptic, curative, lubricating, cleansing, and similar purposes. Dated December 7, 1877.

Dental Apparatus.—No. 4550.—F. Oehlecker, of Hamburg, Germany. Improvements in dental apparatus. Dated December 1, 1877.

Disoxygenising Air.—No. 4359.—W. L. Wise.—A communication from Dr. G. A. Treutler, of Blasewitz, near Dresden, Saxony. A new or an improved method or process for disoxygenising atmospheric air. Dated November 21, 1877.

Filters.—No. 4637.—F. T. Bond, of Gloucester, Doctor of Medicine. Improvements in filters. Dated December 7, 1877.

Filters.—No. 1006.—A. J. Bernays, professor of chemistry at St. Thomas's Hospital, Lambeth, London. Improvements in filters for purifying water. Dated March 13, 1878.

Filter Presses.—No. 1298.—E. C. Prentice, of Stowmarket, Suffolk. Improvements in filter presses. Dated April 2, 1878.

Filter Presses.—No. 4725.—H. Staples, of 2 Buckland Villas, Belsize Park, London, and T. S. Wilson, of 52 Sparsbolt Road, Crouch Hill, Middlesex, engineer. Improvements in filter presses. Dated December 12, 1877.

Invalid Beds.—No. 4480.—A. Lefebvre, of Paris, merchant. A new system of mechanic and elastic beds for wounded and paralysed men. Dated November 28, 1877.

Invalid Beds.—No. 4439.—W. M. Green, of 173 Priuce of Wales Road, Kentish Town, London, and W. Jack, of 20 Sandbrook Road, Stoke Newington, invalid furniture and adjustable chair and bed manufacturer. Improvements in adjustable chairs, lounges, and beds, and in mattresses and fittings for the same. Dated November 26, 1877.

Isinglass.—No. 4542.—P. Jensen.—A communication from C. A. Sahlinström, of Stockholm, Sweden. Improvements in the manufacture of isinglass, gelatine, and glue. Dated December 1, 1877.

Medical Compound.—No. 4238.—L. A. Bartlett, of 14 Southampton Buildings, London. An improved medical compound. Dated November 13, 1877.

Oil Cakes, &c.—No. 4631.—T. McDonald, oil mill foreman, and J. W. Lawrence, millwright, both of Hull, Yorkshire. Improvements in machinery or apparatus employed in the manufacture of oil, seed, and composition cakes. Dated December 6, 1877.

Purifying Water.—No. 4536.—F. Wirth.—A communication from E. Bohlig, chemist, of Eisenach, Germany. Improvements in purifying water. Dated December 1, 1877.

Respirator.—No. 4362. C. B. Ball, of Blaenavon, Pontypool, Monmouthshire, doctor of medicine. An improved apparatus or respirator to enable persons to breathe in an impure atmosphere. Dated November 21, 1877.

Saccharate of Lime.—No. 4671.—J. H. Johnson.—A communication from Dr. A. Seyferth, of Brunswick, Germany. Improvements in the production of saccharate of lime. Dated December 8, 1877.

Saccharate of Lime.—No. 4672.—J. H. Johnson.—A communication from Dr. A. Seyferth, of Brunswick, Germany. Improvements in the purification and treatment of saccharate of lime, and in the application of the products resulting therefrom. Dated December 8, 1877.

Stoppers.—No. 77.—A. M. Clark.—A communication from F. A. Howig, of San Francisco, Cal., United States. Improvements in the manufacture of wooden bottle-stoppers and bungs. Dated January 5, 1878.

Soda and Potash.—No. 4880.—W. Weldon, of Rede Hall, Burstow, Surrey. An improvement in the manufacture of soda and potash by the Leblanc process. Dated December 24, 1877.

Soda and Potash.—No. 133.—W. Weldon, of Rede Hall, Burstow, Surrey. An improvement in the manufacture of soda and potash by the Leblanc process. Dated January 11, 1878.

Treating Hydrocarbons.—No. 4769.—C. D. Abel.—A communication from C. Friedel and J. M. Crafts, both of Paris. Improvements in the treatment of hydrocarbons, for their purification and conversion into other products. Dated December 15, 1877.

Vegetable Oil.—No. 1345.—W. R. Lake.—A communication from H. A. Clark, of Boston, Mass., United States. An improved process or mode of treating vegetable oils to adapt them for use in the preparation of waterproof cloth and the like. Dated April 4, 1878.

Specifications published during the month :—

Postage 1d. each extra.

1877.

3469. J. L. Pulvermacher. Generating, &c., and applying electricity. 10d.

3643. A. Fryer. Treating the refuse of towns. 6d.

3660. H. Loewy. Truss. 6d.

3672. E. W. Hammoud & J. Wilkinson. Stoppers, taps, and valves for beer and other barrels. 6d.

3687. W. H. Miller & A. P. Stedman. Manufacture of tin or other metal cans or bottles for containing oils, &c. 6d.

3692. H. Brooks. Stopping apparatus for scent and other bottles. 6d.

3698. J. P. Griess. Obtaining colouring matters. 4d.

3703. E. G. Brewer. Photo-celluloid. 2d.

3705. G. De Sainte-Marie. Apparatus for applying capsules to bottles, &c. 6d.

3724. E. P. Alexander. Water filters. 6d.

3731. H. Caro. Colouring matters. 4d.

3734. J. R. Harper. Evaporating apparatus. 6d.

3737. R. Hoffmann. Colouring matters. 4d.

3751. H. Caro. Colouring matters. 4d.

3753. S. Pitt. Bottle-closing devices. 8d.

3756. A. M. Clark. Inhalers. 2d.

3775. P. Wirth. Trusses. 2d.

3788. A. M. Clark. Treatment of preserved eggs. 2d.

3798. Mary S. Seltzer. Spinal supporters. 2d.

3805. J. Holden. Receptacles for acids and chemical fluids. 4d.

3810. J. T. Willett. Bottle-corking machines. 2d.

3842. J. Rogers. Manufacture of turned wooden boxes. 6d.

3864. T. Griffiths. Pigments. 4d.

3865. J. H. Johnson. Preparation and treatment of saccharate of lime. 6d.

3867. P. Wirth. Manufacture of hydrated peroxide of iron, &c. 6d.

3893. W. H. Roeke. Apparatus for stoppering bottles. 2d.

3898. E. P. Alexander. Manufacture of soap. 2d.

3902. A. MacDonell. Apparatus for filling and corking bottles. 6d.

3903. H. Codd. Bottles for aerated liquids. 6d.

3911. G. Clark. Bottle stoppers. 2d.

3931. J. Swindells. Stands for casks or barrels. 6d.

3943. L. Sallien. Apparatus for filtering liquids. 4d.

3959. H. Schildberg. Apparatus for sprinkling, in spray, scents, disinfectants, &c. 6d.

3964. H. Martin. Apparatus used in extracting oil. 2d.

3977. H. Y. D. Scott. Treating refuse matters for the manufacture of manure. 4d.

3992. F. Wirth. Treating ammoniacal liquids. 6d.

4019. F. Wirth. Drying apparatus for scientific and chemical purposes. 6d.

4043. L. Rose. Stoppers for bottles. 6d.

4062. C. Morfit. Food preparations. 4d.

4066. F. S. Newall. Manufacture of soda and potash. 2d.

4069. H. B. Taylor. Apparatus for automatically tilting casks. 6d.

4985. J. T. Way. Manufacture of mineral gum. 4d.

4994. M. Nenstadt. Manufacture and production of salicylic acid. 6d.

4142. W. Thompson. Manufacture of white lead. 8d.

1878.

890. W. H. Hicks. Stoppers and stopper fastenings for bottles, &c. 4d.



BANKRUPTS.

BRUNTON, WILLIAM RIDDELL, 43 Kirkdale, Sydenham, apothecary. May 1.
COLEMAN, WILLIAM JUBY, 20 Budge Row, manufacturing chemist. May 1.
DOWLING, JOHN, 56 Rodney Street, Liverpool, hydropathist practitioner and dealer in baths, &c. June 1. C.C. Liverpool, June 18 at 12. W. Cooper, Registrar.

LIQUIDATIONS BY ARRANGEMENT OR COMPOSITION.

Notices of first meetings of creditors have been issued in relation to the following. The dates are those of the "London Gazette" in which the notices appeared.

ADAMS, SAMUEL, JUN., 18 Stockport Road, Ryecroft, Ashton-under-Lyne, druggist and drysalter. May 30.

BARCROFT, RICHARD, Radcliffe Hall, Radcliffe, manufacturing chemist. May 18.

BROWN, JOSEPH MAYNARD, Market Street, Maidstone, veterinary surgeon. June 6.

BRYANT, JOHN HENRY, 1 Tousley Hill, Wandsworth, surgeon. May 21.

CRABTREE, JOHN, Walsden, Rochdale, manufacturing chemist. June 1.

CROSSBY, JOSEPH PARKER, Thornton, near Bradford, late 2 Park Square, Leeds, physician and surgeon. May 27.

DIXON, JOHN FOSTER, Leeds, druggist. May 25.

DODDS, JOHN FOSTER, 35 Elswick Row, Newcastle, late Black Hill, water manufacturer. May 27.

FARNDAL, GEORGE, 65 Newport Road, Middlesborough, chemist. May 2.

FLEETWOOD, CHARLES JOHN, trading as Barrett, Wood & Co., York, Scarborough, aerated water manufacturer. May 24.

GITTINGS, ALFRED, Langley, and 1 Freeth Street, late 38 Birmingham Street, Oldbury, chemist. June 8.

GOULD, THOMAS, Halesowen, surgeon. April 24.

GREGORY, THOMAS RODGER, and SCOVELL, ROBERT, trading as George Mayor & Co., Love Lane, Bankside, black lead manufacturers, and gun and drug grinders and packers. May 28.

HUTTON, ROBERT HOWARD, 74 Gloucester Place, and 5 Upper Berkeley Street, Portman Square, late Rothesmeade, Ryde, and Ackenthorpe, Westmoreland, bouc setter. June 8.

JOHNSON, MARK, Blacklow Road, Hnyton, near Liverpool, chemist. May 6.

JENKINS, HERBERT, and JENKINS, FRANK, Amesbury, marine store dealer and mineral water manufacturers. May 31.

LEATHER, JOHN KNOWLES, Watson Street, St. Helen's, manufacturing chemist. May 14.

M McNULTY, MICHAEL JOSEPH, Stepney Works and Brewery, Union Street, Stepney, and 54 Paleonar Street, Newcastle, drysalter, &c. May 8.

MOORE, WILLIAM DALY, Neath, surgeon. May 9.

NICHOLSON, CHARLES, Commercial Street, Batley, chemist. May 13.

PERCE, THOMAS DAVID, Llanelly, Brecon, surgeon. May 17.

ROBINSON, JOSEPH, Market Place, Bishop Auckland, druggist and grocer. May 10.

RUMBOLD, WALTER, 224 Old Kent Road, surgeon. May 10.

SANDS, ALFRED, 424 Oxford Street, manufacturing chemist. May 7.

TAYLOR, HENRY HYLTON, Gilkes Street, Gruncy Street, and Linthorpe Road, Middlesborough, chemist, and late dealer in laud. May 22.

WHITEHEAD, JOHN, Ford Lane, Broughton Road, and 4 Travis Street, Pendleton, mineral water manufacturer. May 30.

PARTNERSHIPS DISSOLVED.

ADAMS & TODD, Buugay, Suffolk, surgeons. May 2.

BENNETT & MILLAR, Nelson, Marsden Hall, and Colne, surgeons. May 21.

CHECKETTS & CO., 84 and 85 Queen Street, Dublin, chemists. May 10.

CRABTREE, J. & W., Walsden, Rochdale, manufacturing chemists. May 23.

DAONALL & SEARLE, Redhill, Surrey, manufacturers of mineral waters. January 31.

LIN & Co., Crown Works, Bow Common Lane, Middlesex, manu-
 rers of fancy soaps, &c. April 30.
 & BRIGGS, 2 Chepstow Villas, Bayswater, and 218 Marylebone
 St., Middlesex, surgeons. April 5.
 & Co. and PROBYN & Co., 7 Pall Mall East, and elsewhere,
 wholesale and retail chemists and druggists and manufacturers of
 per beds, mineral waters, &c. March 25; as regards W. E. L.
 per.
 & HARMER, Jersey Street, Oldham Road, Manchester, manufac-
 g chemists, drysalters, and oil merchants. March 19.
 P, S., & Co., New Bridge Street, Salford, mineral water manufac-
 rs. February 23.
 EGDEN & Co., Higher Openshaw, manufacturing chemists. June 5.
 s by D. Bleackley.

ROGERSON & NEW, Bedford and Amptill, veterinary surgeons. April 23.
 SHAIL & COOMBE, Melksham, Wilts, soda water, &c., manufacturers. April 1
 Debts by A. Coombe.
 THYNE & TAYLOR, 140 Minories, London, surgeons. March 25. Debts by
 T. Thyne.
 WAGSTAFF & BODGER, Leighton Buzzard, surgeons. May 1.
 SCOTCH SEQUESTRATIONS.
 FORSYTH, JAMES, & Co., wholesale merchants and chemists, 53 Regent Quay,
 Aberdeen, and William Forsyth, the only partner, and as an individual.
 May 7.
 WALKER, ROBERT, manufacturing chemist, 217 Buchanan Street, Glasgow
 May 13.

Exports of Drugs, Medicines, &c., FROM THE PORT OF LONDON, DURING THE MONTH OF MAY, 1878.

following list has been compiled from official sources, and is as nearly accurate as it can be
 made. It professes to record every shipment of the above-named goods in the period defined:—

<p> AHRENS & Co.—Hioغو: <i>Drugs</i>, 106<i>l</i>. ALCOCK.—Port Philip: <i>Lozenges</i>, 117<i>l</i>. F. ALDRIDGE & Co.—Aden: <i>Mdcs</i>, 11<i>l</i>. Bombay: 73<i>l</i>. L. ALEXANDER.—Marseilles: <i>Cassia Lignea</i>, 12,544 lbs. <i>Chmcls</i>, 54<i>l</i>. H. ALLEN.—Madras: <i>Prfmry</i>, 165<i>l</i>. PORT & MORGAN.—Port Philip: <i>Mdcs</i>, 95<i>l</i>. & A. ANDERSON.—St. Vincent: <i>Linsced Cake</i>, 26<i>l</i>. MILLINARIS Co.—Jamaica: <i>Mineral Waters</i>, 850<i>l</i>. Welling- <i>Mineral Waters</i>, 48<i>l</i>. Mauritius: <i>Mineral Waters</i>, 38<i>l</i>. <i>raiso</i>: <i>Mineral Waters</i>, 272<i>l</i>. MITAGE, FRY & Co.—Canterbury: <i>Mdcs</i>, 47<i>l</i>.; <i>Drugs</i>, Colombo: <i>Chmcls</i>, 250<i>l</i>. ATKINS & Co.—Antwerp: <i>Mdcs</i>, 50<i>l</i>. Hambro': s, 48<i>l</i>. Monte Video: <i>Drugs</i>, 65<i>l</i>. Stoekholm: <i>Mdcs</i>, Stettin: <i>Mdcs</i>, 185<i>l</i>. Boulogne: <i>Peruv. Bark</i>, s; <i>Drugs</i>, 806<i>l</i>.; <i>Opium</i>, 112 lbs; <i>Shellac</i>, 26½ cs; <i>Iodine</i>, <i>Chmcls</i>, 24<i>l</i>.; <i>Mdcs</i>, 66<i>l</i>.; Marseilles: <i>Drugs</i>, 34<i>l</i>. ATKINSON.—Hambro: <i>Chmcls</i>, 37<i>l</i>.—Rotterdam: ce, 4 cs; <i>Chmcls</i>, 60<i>l</i>.; <i>Drugs</i>, 70<i>l</i>.—Marseilles: <i>Chmcls</i>, Stettin: <i>Chmcls</i>, 37<i>l</i>.—Antwerp: <i>Chmcls</i>, 25<i>l</i>. AVERY.—Sydney: <i>Mdcs</i>, 22<i>l</i>. LEY & LEETHAM.—Copenhagen: <i>Apoth Wares</i>, 15<i>l</i>. ss Bros. & Co.—Hong Kong: <i>Chmcls</i>, 12<i>l</i>.—Welling- <i>Drugs</i>, 25<i>l</i>.—Yokohama: <i>Drugs</i>, 575<i>l</i>.; <i>Sulph Quinine</i>, G. BARR.—Demerara: <i>Suphate Ammonia</i>, 566<i>l</i>. RRON, HARVEY & Co.—Calcutta: <i>Mdcs</i>, 49<i>l</i>.—Canter- <i>Mdcs</i>, 109<i>l</i>.; <i>Chmcls</i>, 4<i>l</i>. New York: <i>Chmcls</i>, 40<i>l</i>.; s, 500<i>l</i>.; Montreal, <i>Mdcs</i>, 47<i>l</i>. RRON, SQUIRE & Co.—Pt. Natal: <i>Mdcs</i>, 28<i>l</i>.—Madras, s, 25<i>l</i>.—Calcutta: <i>Mdcs</i>, 309<i>l</i>.; <i>Chmcls</i>, 24<i>l</i>.—Co- o, <i>Mdcs</i>, 144<i>l</i>. BASTIN.—Madras: <i>Mdcs</i>, 46<i>l</i>. C. BENNETT.—Odessa: <i>Carbolic Acid</i>, 51<i>l</i>. BERGER SPENCE & Co., Brisbane: <i>Caustic Soda</i>, 105 cs. </p>	<p> BERNHARD & PHILLIPS.—Hambro': <i>Linsced Oil</i>, 5,000 gals. BESLEYS & WILSON.—Hambro': <i>Mdcs</i>, 1,600<i>l</i>.; <i>Iodine</i>, 1,300<i>l</i>.—Rotterdam: <i>Chmcls</i>, 104<i>l</i>. B. W. BIGGS.—Lisbon: <i>Mdcs</i>, 40<i>l</i>.; <i>Chmcls</i>, 3<i>l</i>.—Oporto: <i>Chmcls</i>, 5<i>l</i>. A. G. BILSON.—Rotterdam: <i>Linsced Oil</i>, 522 gals. BISHOP & Co.—Lisbon: <i>Prfmry</i>, 30<i>l</i>. C. J. BLACKITH & Co.—Canterbury: <i>Chmcls</i>, 50<i>l</i>. E. BLAINDBY.—Alexandria: <i>Sarsaparilla</i>, 2 cs. BOLTON, SON & Co.—Algoa Bay: <i>Mdcs</i>, 30<i>l</i>. BOSDET, FORMAN & Co.—Hambro': <i>Chmcls</i>, 23<i>l</i>. A. M. BOYD.—Sydney: <i>Chloroform</i>, 224 lbs. BRANDRAM BROS. & Co.—Madeira: <i>Chmcls</i>, 289<i>l</i>.—Gib- <i>raltar</i>: <i>Satpetre</i>, 125 cs; <i>Chmcls</i>, 420<i>l</i>.—Oporto: <i>Chmcls</i>, 226<i>l</i>.—Algoa Bay: <i>Chmcls</i>, 17<i>l</i>.—Amapala: <i>Chmcls</i>, 7<i>l</i>.— Lisbon: <i>Chmcls</i>, 449<i>l</i>.—Tereeira: <i>Chmcls</i>, 10<i>l</i>.—Madras: <i>Chmcls</i>, 36<i>l</i>.—Mauritius: <i>Chmcls</i>, 36<i>l</i>. R. BROOKS & Co.—Sydney: <i>Drugs</i>, 149<i>l</i>.; <i>Mdcs</i>, 122<i>l</i>.; <i>Chmcls</i>, 20<i>l</i>. W. BROOKS.—Ghent: <i>Mdcs</i>, 25<i>l</i>.—Singapore: <i>Chmcls</i>, 10<i>l</i>.—Hambro: <i>Shellac</i>, 7 cs.—Le Trepont: <i>Gum Arabic</i> 24 cs; <i>Gum Tragacanth</i>, 135 cs; <i>Turmeric</i>, 190 cs. W. H. BROWN & Co.—Rotterdam: <i>Chmcls</i>, 64<i>l</i>. W. W. BRUNETT.—Hobart Town: <i>Mdcs</i>, 87<i>l</i>. BURGOYNE, BURBIDGE & Co.—Singapore: <i>Mdcs</i>, 100<i>l</i>. CAHLMAN BROS.—Boulogne: <i>Prfmry</i>, 18<i>l</i>. CALDWELL, WATSON & Co.—Shanghai: <i>Chmcls</i>, 150<i>l</i>. A. A. CAMPBELL & Co.—Calcutta: <i>Mdcs</i>, 9<i>l</i>.—Hong Kong: <i>Chmcls</i>, 13<i>l</i>.; <i>Mdcs</i>, 11<i>l</i>. E. W. CARLING & Co.—Paris: <i>Chmcls</i>, 125<i>l</i>.—Brussels: <i>Shellac</i>, 32½ cs; <i>Cochineal</i>, 12 cs; <i>Magnesia</i>, 6<i>l</i>.; <i>Citric</i> <i>Acid</i>, 31<i>l</i>. E. W. CARLING & Co.—Antwerp: <i>Magnesia</i>, 14<i>l</i>. W. CASLY.—Sydney: <i>Liquorice</i>, 70<i>l</i>. CHAPMAN & Co.—Rotterdam: <i>Chmcls</i>, 475<i>l</i>.—Reval: <i>Chmcls</i>, 60<i>l</i>.—Rotterdam: <i>Chmcls</i>, 348<i>l</i>. </p>
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CHRISTOPHERSON & Co.—Canterbury: *Chmcls*, 51l.—Port Philip: *Saltpetre*, 20 cs; *Sydney*: *Chmcls*, 40l.

J. CLINCH & SON.—Adelaide: *Chmcls*, 24l.

CLIPPINGDALE & Co.—Pt. Philip: *Mdcns*, 38l.

R. COE.—Dunkirk: *Citric Acid*, 25l.

D. V. COLE.—Bombay: *Drugs*, 53l.

W. H. COLE & Co.—Antwerp: *Chmcls*, 164l.—New York: *Drugs*, 65l.

H. COLLIER.—Hambro: *Prfmry*, 29l.; *Chmcls*, 39l.

E. COLLINS.—Hambro: *Drugs*, 15l.

COOLEY & Co.—Calcutta: *Mdcns*, 65l.

J. CONNELL & Co.—Auckland: *Mdcns*, 47l.

COUPER, MCCARNIE & Co.—Mauritius: *Sal Ammonia*, 1,320l.

W. B. CRANWELL & Co.—Buenos Ayres: *Chmcls*, 215l.; *Mdcns*, 605l.; *Drugs*, 315l.—Monte Video, 167l.; *Drugs*, 95l.; *Chmcls*, 28l.

W. CAUDERY & Co.—Bordeaux: *Chmcls*, 70l.—San Francisco: *Chmcls*, 25l.—Santos: *Saltpetre*, 114 cs.—Rotterdam: *Chmcls*, 20l.—Carthage: *Chmcls*, 190l.; *Saltpetre*, 99½ cs.—Reval: *Chmcls*, 750l.—Paris: *Chmcls*, 280l.—Constantinople: *Chmcls*, 392l.—New York: *Chmcls*, 60l.—Port Philip: *Chmcls*, 125l.

P. DALTON.—New York: *Chmcls*, 540l.

J. A. DARE.—Port Philip: *Mdcns*, 375l.—Montreal: *Medl Preparations*, 120l.; *Cod Liver Oil*, 26l.

DAVIES & PUCK.—Yokohama: *Drugs*, 10l.

DAVY, YATES & Co.—Rio Janeiro: *Mdcns*, 200l.—Demerara: *Mdcns*, 40l.—Hambro: *Chmcls*, 18l.—Naples: *Mdcns*, 10l.—Adelaide: *Mdcns*, 230l.—Port Natal: *Mdcns*, 100l.

DAWSON BROS.—Calcutta: *Mdcns*, 20l.—Leghorn: *Mdcns*, 240l.—Genoa: *Mdcns*, 85l.—Gibraltar: *Mdcns*, 10l.—Bremen: *Iodine*, 80l.—Hong Kong: *Mdcns*, 20l.—Penang: *Mdcns*, 80l.—Buenos Ayres: *Mdcns*, 90l.—Pernambuco: *Chmcls*, 100l.—Cape of Good Hope: *Mdcns*, 80l.—Singapore: *Mdcns*, 65l.—Gothenburg: *Mdcns*, 25l.—Bangkok: *Mdcns*, 30l.—Madras: *Mdcns*, 75l.; *Chmcls*, 6l.—Hambro: *Mdcns*, 10l.—Bombay: *Mdcns*, 50l.—Pt. Philip: *Mdcns*, 492l.—*Chmcls*, 8l.—Barbados: *Mdcns*, 45l.—Sydney: *Mdcns*, 344l.—Swan River: *Mdcns*, 50l.

C. DAY & Co.—Hambro: *Cochineal*, 1 cs.

J. DELABE.—Hambro: *Shellac*, 27 cs.—Rouen: *Palm Oil*, 57 cs.—Antwerp: *Linseed Oil*, 1,000 galls.—Bremen: *Tapioca*, 35½ cs.—Rotterdam: *Anthracine*, 338 cs.

DENNIS, ROCK & Co.—Calcutta: *Drugs*, 315l.

W. J. DODDS.—Rio Janeiro: *Chloroform*, 30 lbs.

DOMER & Co.—Pt. Philip: *Chmcls*, 20l.

DUFF, LAST & Co.—Mauritius: *Mdcns*, 24l.

DUNN & Co.—Valparaiso: *Drugs*, 50l.—Calcutta: *Drugs*, 30l.—Nagasaki: *Mdcns*, 350l.—Toronto: *Drugs*, 125l.

A. DURANT & Co.—Algoa Bay: *Prfmry*, 48l.—Kurrachee: *Chmcls*, 11l.

EDGEELL & Co.—Sydney: *Saccharum*, 597l.; *Chmcls*, 31l.

EGAN, HALL & Co.—Port Philip: *Lozenges*, 70l.

ELKAN & Co.—Reval: *Shellac*, 79 cs.

J. ELLIOTT.—Calcutta: *Mdcns*, 68l.; *Quinine*, 851l.; *Mdcns*, 9l.; *Cod Liver Oil*, 53l.

ESCOMBE BROS. & Co.—Calcutta: *Mdcns*, 73l.; *Prfmry*, 70l.; *Drugs*, 6l.—Bombay: *Mdcns*, 20l.; *Cochineal*, 19 cs.

EVANS, LESCHER & Co.—Marseilles: *Mdcns*, 15l.—Calcutta: *Mdcns*, 396l.; *Chmcls*, 38l.; *Apoth Warcs*, 56l.—Madras: *Mdcns*, 109l.

FELGATE & Co.—Calcutta: *Mdcns*, 39l.

T. FICKLING.—Ilbrail: *Prfmry*, 18l.

FINLAY, CAMPBELL & Co.—Bombay: *Chmcls*, 25l.; *Mdcns*, 12l.

H. D. FISHER & Co.—Calcutta: *Chmcls*, 1,600l.—Bombay: *Chmcls*, 675l.

J. W. FISHER.—Hambro: *Drugs*, 316l.; *Cochineal*, 23 cs; *Shellac*, 7 cs, 6 cs, 10 cs, 23 cs; *Spices*, 1,685 lbs; *Ginger*, 361 cs; *Chmcls*, 262l.; *Prfmry*, 46l.—Rotterdam: *Shellac*, 4 cs; *Drugs*, 198l.; *Chmcls*, 197l.; *Spices*, 70l.—Amsterdam: *Spices*, 6,135 lbs; *Barcelona*: *Drugs*, 14l.—St. Petersburg: *Chmcls*, 115l.; *Spices*, 69l.; *Ginger*, 6 cs; *Drugs*, 84l.—Antwerp: *Drugs*, 25l.; *Spices*, 1,752 lbs; *Chmcls*, 108l.—Cape of Good Hope: *Chmcls*, 19l.—Amsterdam: *Chmcls*, 17l.; *Spices*, 3,981 lbs; *Peruv. Bark*, 2 cs.—Dantzic: *Shellac*, 7 cs; *Spices*, 2,715 lbs.—Lisbon: *Drugs*, 9l.—Brussels: *Saltpetre*, 16l.—Reval: *Chmcls*, 66l.—Port Philip: *Drugs*, 123l.; *Shellac*, 10 cs.—Odessa: *Drugs*, 10l.—Ilbrail: *Chmcls*, 75l.; *Shellac*, 4 cs.—Montreal: *Shellac*, 11 cs.—Riga: *Chmcls*, 24l.—Copenhagen: *Drugs*, 6l., 32l.; *Spices*, 1,707 lbs.—Constantinople: *Chmcls*, 40l.—Barcelona: *Drugs*, 133l.—New York: *Drugs*, 50l.

J. D. FLEMING.—Port Natal: *Mdcns*, 33l.

J. FORSEY.—Bombay: *Quinine*, 640l.; *Drugs*, 50l.; *Chmcls*, 30l.; *Mdcns*, 342l.

FORWOOD BROS. & Co.—Madeira: *Chmcls*, 15l.

F. H. FAULDING & Co.—Adelaide: *Mdcns*, 108l.; *Drugs*, 11l.; *Apoth Warcs*, 69l.

J. & A. B. FREELAND.—Hobart Town: *Chmcls*, 2l.—Mauritius: *Mdcns*, 33l.; *Chmcls*, 53l.

FREEMAN & ALLEN.—Madras: *Mdcns*, 25l.

P. O. FYSH & Co.—Harlingen: *Chmcls*, 6l.

GALE & FRIEND.—Madras: *Chmcls*, 11l.

J. GARFORD & SON.—Hong Kong: *Linseed Oil*, 375 galls.

H. GARRETT.—Shanghai: *Mdcns*, 130l.

GAUBERT & METCALFE.—Amsterdam: *Spices*, 10,528 lbs; *Marseilles*: *Spices*, 36,256 lbs.; *Drugs*, 21l.—Rotterdam: *Drugs*, 2,784l.; *Spices*, 73l.; *Peruv. Bark*, 791 cs.—Genoa: *Drugs*, 347l.—Yokohama: *Chmcls*, 420l.—Antwerp: *Drugs*, 28l.; *Chmcls*, 17l.—Brussels: *Peruv. Bark*, 2 cs; *Drugs*, 26l.; *Spices*, 260 lbs.—Reval: *Drugs*, 27l.—Bremen: *Drugs*, 275l.—Hambro: *Drugs*, 88l.; *Chmcls*, 27l.

GELLATLY, HANKEY & Co.—Zanzibar: *Chmcls*, 50l.

C. F. GERHARDT.—Paris: *Chmcls*, 245l., 260l.—New York: *Drugs*, 27l.; *Chmcls*, 617l.; *Mdcns*, 47l.

A. M. GILLESPIE & Co.—St. Lucia: *Mdcns*, 11l.

F. GRAF.—Bremen: *Peruv. Bark*, 738 cs.

H. GREY, JUNR.—Reval: *Drugs*, 132l., 61l.; *Mdcns*, 75l.; *Gum Arabic*, 16 cs; *Shellac*, 22½ cs; *Cochineal*, 17 cs; *Peruv. Bark*, 3 cs.—Rio Janeiro: *Cassia Lignea*, 1,274 lbs.—Amsterdam: *Cassia Lignea*, 6,356 lbs.; *Citric Acid*, 23l.—Genoa: *Drugs*, 25l.; *Cinnamon Chips*, 1,064 lbs.; *Cinnamon*, 533 lbs.—Odessa: *Chmcls*, 118l.—Riga: *Drugs*, 58l.; *Cassia Oil*, 89l.—Marseilles: *Ipccacuanha*, 64l.; *Citric Acid*, 24l.; *Drugs*, 10l.; *Cassia Lignea*, 1,291 lbs.—Leghorn: *Cinnamon Chips*, 3,689 lbs.; *Cloves*, 500 lbs; *Tamarinds*, 38l.—Bremen: *Carb Ammonia*, 5½ cs.—Ghent: *Shellac*, 6 cs; *Castor Oil*, 28 cs.—Hambro: *Cochineal*, 206 cs; *Drugs*, 93l.; *Citric Acid*, 126l.; *Senna*, 7l.—Stockholm: *Cochineal*, 17 cs.—Dantzic: *Drugs*, 21l.; *Chmcls*, 21l.—Antwerp: *Drugs*, 10l.—Rotterdam: *Drugs*, 22l., 64l.; *Senna*, 28l.; *Cassia Lignea*, 2,432 lbs.—Brussels: *Peruv. Bark*, 1 cs; *Drugs*, 46l.—Havre: *Castor Oil*, 153 cs.—St. Petersburg: *Drugs*, 91l., 91l.; *Shellac*, 80 cs; *Chmcls*, 66l.

GRIMWADE, RIDLEY & Co.—Wellington: *Drugs*, 357l.; *Chmcls*, 328l.; *Prfmry*, 59l.—Otago: *Ginger*, 1 cs; *Liquorice*, 4 cs; *Arrowroot*, 2 cs; *Drugs*, 1,058l.; *Chmcls*, 357l.; *Glycerine*, 6l.—Auckland: *Drugs*, 51l.; *Chmcls*, 36l.—Brisbane: *Drugs*, 253l.; *Chmcls*, 192l.—Canterbury: *Drugs*, 412l.; *Chmcls*, 106l.; *Ginger*, 16 cs.—Port Philip: *Drugs*, 3,061l.; *Chmcls*, 963l.—Sydney: *Chmcls*, 547l.; *Drugs*, 1,278l.; *Gum Arabic*, 23 cs; *Ginger*, 2 cs.

J. HADDON & Co.—Calcutta: *Mdcns*, 68l.

J. HARRIS & Co.—Stettin: *Drugs*, 13l.; *Shellac*, 8 cs.—Brussels: *Linseed Oil*, 2,488 galls.—Dantzic: *Linseed Oil*, 1,244 galls.; *Chmcls*, 50l.; *Ginger*, 4 cs; *Drugs*, 58l.—Amsterdam: *Drugs*, 10l.—Bremen: *Shellac*, 19 cs; *Arrowroot*, 6 cs.—Hambro: *Linseed Oil*, 2,115 galls; *Drugs*, 128l.; *Cinnamon Chip*, 15 cs; *Arrowroot*, 22l.; *Drugs*, 15l.—Riga: *Cochineal*, 27 cs, 11 cs; *Shellac*, 12 cs.—Malta: *Chmcls*, 50l.—Odessa:

al, 3 cs.; Aloes, 2 cs.; Cubebs, 2 cs.; Castor Oil, 14 cs.;
r, 5 cs.; Prfmry, 40l.—Rotterdam: Coconut Oil,
Peruv. Bark, 331 cs.; Drugs, 25l.; Shellac, 36 cs.—St.
e: Coconut Oil, 25 cs.—Göthenburg: Linseed Oil,
alls.—New York: Drugs, 30l., 74l.—Reval: Cocki-
3 cs.—St. Petersburg: Gum Sandrac, 22 cs.; Gum
31 cs.

HARVEY.—Boulogne: Peruv. Bark, 148l.

HEAD & Co.—Bombay: Mdens, 149l.

HELDER.—Hambro: Cochineal, 4 cs.—Rotterdam:
2l, 8 cs.

HENNEKE.—Brisbane: Chmcls, 30l.

INGS & Co.—New York: Mdens, 25l.—Naples:
102l.—Calcutta: Mdens, 526l.

E. BORMAN & Co.—Pt. Philip: Mdens, 120l.—
7: Mdens, 75l.

MAN & Co.—Malaga: Prfmry, 81l.; Castor Oil, 15l.—
ar: Saltpetre, 2 tons.

HITCHCOCK.—Paris: Chmcls, 20l.—Stettin: Chmcls,
openhagen: Spices, 3,896 lbs.; Ginger, 14 cs.; Shellac,
Drugs, 137l.—Brussels: Shellac, 8 cs.—Hambro:
663 lbs.—St. Petersburg: Shellac, 27 cs.

ITZSCHILD.—Marseilles: Chmcls, 10l.—Antwerp:
85l.; Magnesia, 17l.—St. Nazaïre: Drugs, 32l.

KINSONS, PRESTONS & Co.—Montreal: Mdens, 27l.

SKINSONS, STEAD & Co.—Port Natal: Mdens, 10l.—
ara: Mdens, 338l.; Chmcls, 6l.; Mdenl Oil, 2l. Malta:
32l.—Mauritius: Mdens, 35l.—Port Philip: Mdens,

HODGKINSON & Co.—Port Natal: Mdens, 13l.—Mon-
Mdens, 151l.

ODGSON.—Calcutta: Chmcls, 19l. Quinine, 500 ozs.

OLLOWAY.—Hambro: Mdens, 49l.—Lisbon: Mdens,
Marseilles: Mdens, 32l.—Oporto: Drugs, 11l.—Shang-
Mdens, 20l.

HOLWORTHY.—Hobart Town: Chmcls, 19l.; Mdens,

ONYCHURCH & Co.—Port Philip: Drugs, 100l.—Lis-
Drugs, 76l.—Leghorn: Drugs, 18l.—Sydney: Drugs,

HOOTON & YATES.—Madeira: Chmcls, 8l.

HORE.—Galatz: Gum Olibanum, 134 cs.

OWARD & Co.—Mauritius: Prfmry, 80l.

CRAFT & Co.—Brisbane: Prfmry, 10l.

UBBUCK & Co.—Napier: Castor Oil, 21l.—Jamaica:
13l.

HUME.—Calcutta: Mdens, 25l.

SAACS.—Auckland: Mdens, 43l.

J. JACOB.—Hambro: Shellac, 9 cs.

JACQUES.—Montreal: Drugs, 15l.

OP & HUMBLE.—Calcutta: Quinine, 1,025l.

OHNSON & Co.—Rio de Janeiro: Mdens, 18l.

NSON & SON.—Calcutta: Mdens, 88l.; Chmcls, 36l.—
real: Mdens, 13l.—Dunkirk: Chmcls, 46l.—Bombay:
r, 51l.—Adelaide: Chmcls, &c., 12l.

ISLEY & ELKINGTON.—Santander: Prfmry, 64l.; Chmcls,

IGHT & SON.—Odessa: Sal Ammoniac, 40l.—St. Peters-
Sal Ammoniac, 555 cs.

OWLES & FOSTER.—Rio de Janeiro: Mdens, 14l.

BERT & MORRISON.—Adelaide: Mdenl Oil, 274 galls.;
38l.

OTON, EDDEN & Co.—Sydney: Drugs, 129l.—Singa-
Drugs, 76l.

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KINS & HADLAND.—Brisbane: Mdens, 279l.—Calcutta:
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Hambro: Mdens, 19l., 18l.—Bremen: Mdens, 35l.—

Lisbon: Mdens, 180l.—Shanghai: Mdens, 128l.—Pt. Philip
Mdens, 41l.; Genoa: Mdens, 67l.—Montreal: Mdens, 105l.

LEDGER, SMITH & Co.—Oporto: Cod Liver Oil, 100l.

LEETE & BAILLON.—New York: Chmcls, 25l.

G. LESLIE.—Amsterdam: Gum Animi, 3 cs.

A. LEVER BROS.—Constantinople: Chmcls, 63l.

A. LEVI BROS.—Constantinople: Drugs, 14l.

J. LEWIS & Co.—Calcutta:—Prfmry, 665l.—Leghorn:
Prfmry, 10l.—Cadiz: Prfmry, 25l.—Wellington: Mdens,
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D. LINDO.—Jamaica: Mdens, 16l.

LISNER, HOOPER & Co.—Hambro: Sulphate of Ammonia,
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554l.

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MACTAGGART, TIDMAN & Co.—Singapore: Linseed Oil
100 galls.

J. MARRYATT & SONS.—Trinidad: Spices, 14l.; Drugs, 12l.

W. MATHER.—Montreal: Mdens, 25l.—Calcutta: Mdens,
7l.—Malta: Mdens, 32l.—Hambro: Mdens, 10l.

S. MAW, SON & THOMPSON.—Sydney: Apoth Wares, 168l
—Calcutta: Apoth Wares, 18l.; Mdens, 7l.—Auckland:
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Apoth Wares, 71l.—Cape of Good Hope: Apoth Wares, 67l.;
Mdens, 38l.

J. McDONALD & Co.—Swan River: Chmcls, 38l.

MCLEAN BROS. & Co.—Port Philip: Mdens, 20l.

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Marseilles: Sarsaparilla, 1,150 lbs.

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Drugs, 15l.—Otago: Drugs, 80l.; Chmcls, 37l.—Calcutta:
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Philip: Drugs, 100l.

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B. NIND & Co. Oporto:—Chmcls, 12l.

NOLLEN, HENRY & Co.—Boulogne: Mdens, 22l., 34l.;
Peruv. Bark, 267 cs.; Chmcls, 41l.—Malaga: Prfmry, 81l.—
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Prfmry, 15l.—Hambro: Prfmry, 34l.—Santander: Prfmry,
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NORTHCOTT & SONS.—Hambro: Muriate Ammonia, 39l.

C. H. PADDY.—Penang: Chmcls, 10l.; Mdens, 50l.

J. P. PLATT & Co.—Calcutta: Mdens, 86l.

E. S. PAUL.—Hong Kong: Chmcls, 314l.—Shanghai:
Chmcls, 146l.

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Soda, 10 t.—Montreal: Chmcls, 200l.—St. Petersburg:
Chmcls, 230l.

- J. PEEL.—East London: *Mdcs*, 10l.
- PELGATE & CO.—Calcutta: *Prfmry*, 37l.; *Mdcs*, 86l.
- J. PENNY.—Rotterdam: *Shellac*, 31½ cs; *Tapioca*, 14 cs; *Myrabolans*, 57l.—Leghorn: *Spices*, 674 lbs.—Antwerp: *Chmcls*, 59l.—Dunkirk: *Chmcls*, 91l.—Stockholm: *Chmcls*, 17l.—Copenhagen: *Cochineal*, 3¾ cs.—Constantinople: *Chmcls*, 51l.—Trieste: *Drugs*, 21l.—Bremen: *Shellac*, 19¼ cs.—Brussels: *Spices*, 13l.; *Peruv. Bark*, 16l.; *Drugs*, 8l.; *Shellac*, 3 cs.—Konigsburg: *Drugs*, 27l.—Stettin: *Chmcls*, 33l.—Hambro: *Chmcls*, 37l.—Dantzic: *Cochineal*, 38 cs.
- PERKINS & HOMER.—Callao: *Chmcls*, 10l.; *Shellac*, 14 cs.
- PEWTRESS & BARKER.—Colombo: *Mdcs*, 100l.
- E. A. PHILLIPS & CO.—Swan Rivor: *Mdcs*, 72l.
- PHILLIPPS & GRAVES.—Ostend: *Cocoanut Oil*, 627 cs; *Palm Oil*, 53 cs.—Rotterdam: *Cocoanut Oil*, 22 cs; *Chmcls*, 420l., 450l.; *Cochineal*, 7½ cs.—Reval: *Mdcs*, 64l.—Hambro: *Cochineal*, 11 cs; *Drugs*, 10l., 11l.—Bremen: *Drugs*, 55l.—Gothenburg: *Mdcs*, 5l.—St. Petersburg: *Mdcs*, 47l.
- POKORNY, FIELDER & CO.—Rotterdam: *Chmcls*, 989l.; *Iodine*, 258l.—Bremen: *Chmcls*, 86l.—Gothenburg: *Chmcls*, 60l.—Genoa: *Opium*, 118 lbs; *Chmcls*, 76l.—Marseilles: *Chmcls*, 50l.
- PONS & CO.—Valencia: *Chmcls*, 72l.
- J. T. & T. POWELL.—Port Philip: *Myrabolans*, 75 cs.
- F. J. PRITZ.—Hambro: *Chmcls*, 220l.
- T. PURVIS.—Otago: *Mdcs*, 110l.
- RACINE & PALMER.—Paris: *Chmcls*, 30l.
- REHDER & CO.—Kong Kong: *Mdcs*, 30l.
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- R. E. ROBINSON.—Yokohama: *Drugs*, 480l.
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- SADGROVE, LUNG & CO.—Odessa: *Drugs*, 20l.—Genoa: *Drugs*, 7l.—Dantzic: *Drugs*, 56l.—Reval: *Drugs*, 55l.—Hambro: *Drugs*, 75l.—Rotterdam: *Cinnamon*, 4,850 lbs.
- W. H. SAMPSON.—Gothenburg: *Drugs*, 132l.; *Cochineal*, 6 cs.—Norrkoping: *Drugs*, 129l.—St. Petersburg: *Spices*, 180l.—Malmo: *Drugs*, 170l.—Stockholm: *Drugs*, 57l.; *Spices*, 465l.; *Ginger*, 66 cs.—Sundswall: *Cochineal*, 2 cs; *Spices*, 19l.—Havre: *Chmcls*, 90l.—Riga: *Spices*, 81l.; *Drugs*, 65l.—Copenhagen: *Drugs*, 121l.; *Spices*, 3,878 lbs.
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- SINCLAIR, HAMILTON & CO.—Algoa Bay: *Sulphuric Acid*, 9l.; *Acetic Acid*, 13l.
- S. & B. SLEEMAN & CO.—Madras: *Sulphuric Acid*, 27l.
- SMITH, SUNDIUS & CO.—New York: *Mdcs*, 18l.
- F. SMITH.—Hambro: *Chmcls*, 123l.
- F. C. SMITH.—Hambro: *Chmcls*, 29l.; *Mdcs*, 8l.—St. Petersburg: *Chmcls*, 150l.
- N. SMITH.—Dunkirk: *Chmcls*, 7l.
- W. H. SMITH & CO.—Buenos Ayres: *Mdcs*, 60l.
- G. N. SOURRATY & CO.—Bushire: *Chmcls*, 46l.; Bagdad: *Cochineal*, 2 cs.
- SOUTHERN, QUILTY & CO.—Hong Kong: *Chmcls*, 6l.
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- G. F. STAHLSCHEIDT.—Marsilles: *Cassia Lignea*, 58 cs.
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- TAYLOR, BETHELL & CO.—Otago: *Mdcs*, 10l.
- D. TAYLOR & SON.—San Francisco: *Chmcls*, 25l.—New York: *Mdcs*, 64l.; *Chmcl Oil*, 295l.; *Chmcls*, 304l.; *D*, 1,005l.—Bremen: *Mdcs*, 29l.; *Chmcls*, 17l.; *Drugs*, 87l.
- R. D. TAYLOR.—Stockholm: *Drugs*, 30l.—Christiania: *Drugs*, 65l.; *Liquorice*, 10 cs.—Hambro: *Drugs*, 27l.
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- W. T. THOMPSON.—Hambro: *Linseed Oil*, 3,780 galls.
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- TREACHER & CO.—Bombay: *Mdcs*, 43l.—Bombay: *D*, 10l.; *Prfmry*, 22l.; *Mdcs*, 73l.
- TRINDER, ANDERSON & CO.—Adelaide: *Chmcls*, 85l.; *M*, 25l.
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- J. J. WALKER.—Port Natal: *Drugs*, 10l.
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- J. W. WATKINS.—Madras: *Mdcs*, 80l.—St. Lucia: *M*, 24l.
- WEATHERLEY, MEAD & CO.—Hambro: *Prfmry*, 30l.
- WEBSTER, STEEL & CO.—Port Natal: *Chmcl*, 12l.
- WENMAN & CO.—Algoa Bay: *Chmcls*, 97l.
- G. W. WHEATLEY & CO.—Madras: *Drugs*, 20l.—Calcutta: *Drugs*, 32l.
- A. F. WHITE & CO.—Sydney: *Drugs*, 112l.—Hong Kong: *Drugs*, 100l.—Santander: *Drugs*, 13l.—Hambro: *D*, 34l.; *Shellac*, 30 cs.—San Francisco: *Drugs*, 60l.—Gibraltar: *Drugs*, 50l., 40l.—Montreal: *Mdcs*, 40l.
- G. WHYBROW.—Sydney: *Castor Oil*, 28 lbs.
- WILKINSON & DAWSON.—Sydney: *Chmcls*, 10l.
- T. H. WILLIAMS.—Bombay: *Chmcls*, 20l.; *Mdcs*, 37l.
- D. W. WRIGHT.—Lisbon: *Chmcls*, 8l.; *Mdcs*, 5l., 10l.; *Saltpetre*, 21 cs.
- WRIGHTSON & SON.—Brussels: *Linseed Oil*, 1,240 galls.
- Cocoanut Oil*, 125 cs.—Rotterdam: *Cocoanut Oil*, 60 cs.
- J. WYMAN.—Rio Janeiro: *Drugs*, 33l.; *Spices*, 20l.; *Chmcl*, 14l.; *Mdcs*, 524l.

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ons to it, also a "Guide to Materia
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utical Journal, 130 numbers, from
ry, 1875, to June, 1877; any reason-
ffer or exchange. Anderson, chemist,
r.

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dozen Alcock's porous; what offers?
exchange for saleable patents. G. E.,
Stockport Road, Manchester.

of midwifery forceps (Simpson's, and
am's), in excellent condition; offers
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nden Place, Glasgow.

er stand, marble top, as Maw's, fig. 62,
Coventry machinist bicycle, 50-inch,
ct, very cheap. J. W. F., 91 Hammer-
oad, W.

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d-land cut and plain stoppered show
ys, with mahogany stands; what
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oll cylinders, holding 250 gallons each;
brown paper, 2d. per lb.; good Daffy
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Nottingham's, once used, 7s. 6d. Lockwood
chemist, Sheffield.

Entire fittings of 5 handsome chemist's shops for
disposal, including gold-labelled shop bottles
and jars, window carboys, specie jars, &c.,
price 51L, 52L, 65L, 78L, 115L. Lloyd Rayner,
333 Kingsland Road, London, N.

Botany, belladonna, henbane, hemlock, acouite,
stramonium, opium, poppy, colchicum, and
120 more officinal and leading plants, beauti-
fully mounted, classed, and named, 10s. 6d.
Higginson, Newferry, Birkenhead.

American ice-cream soda-water machine, with
18 plated syrup taps. To any large con-
fectioner or druggist it would be most
remunerative in hot weather. Will be sold
at almost a nominal price. Baidon, 73
Princes Street, Edinburgh.

Quart tincture press, new, 8s. 6d.; Southall's
"Materia Medica Cabinet," complete, half-
price, 12s. 6d.; Fergusson's "Practical Sur-
gery," 410 plates, new, 7s. 6d., or exchange
for round sauce bottles. Higginson, New-
ferry, Birkenhead.

Beckett's fruit syrup, Day's game paste, Cab-
burn's balsam, at half retail price; 2 gallons
fine raspberry vinegar, 6s. 6d. gall.; stomach
pump, Maw's, fig. 29, with enema tube, &c.,
in mahogany case, 25s.; good Tinnevelly
senna, 3d. lb. Smith, chemist, Crediton.

Corks, finest white taper vials, 5d. gross;
ginger beers, 4d.; taper daffys, 4d.; best
wines, 8d.; set of tooth scaling instru-
ments, unused, 5s.; 50-inch bright spider
wheel bicycle, 71/10s., cost 131. Halford,
chemist, Hockley, Birmingham.

Pharmaceutical Journals, half-price, unbound,
good condition, separate, or in volumes; per-
fect from 1813 to 1858, 1863, 1864; also 1860,
1861, with few copies missing. *Chemist and
Druggist*, good as new, half price, from 1861
to 1866, 1869, 1870, 1871, 1877, perfect; also
1872, 1875, few copies missing. *Chemist and
Druggist*, a week after issue, half-price in
Yarmouth. Welch, Market Place, Great
Yarmouth.

Attfield's "Chemistry," 1867, quite clean, 6s. 6d.;
Lescher's "Elements of Pharmacy," equal to
new, 5s.; "British Pharmacopoeia," 1867
5s. 6d.; "British Pharmacopoeia and
Family Physician" (pocket edition), 1864
2s. 6d.; "Selecta Prescripta," 16th edition,
new, 4s. Ness, chemist, Torquay.

56 lbs. sem. anisi, 4d. per lb.; 56 lbs. pulv. anisi,
5d.; 20 cwt. pulv. fennigreek, 18s. cwt., any
quantity sent; 2 gross round tin boxes,
2 inches deep, 2 inches diameter, 4s. 6d.
gross. Exchange, Finlly Dun's "Veteri-
nary Medicine," large mortar, small drug
mill. Nicholson, 5 Bailgate, Lincoln.

A 6-ft. 6-in. best plate-glass counter case, 6l.; a
5-ft. do. do., 5l.; a 4-ft. 6-in. do., 90s.; a
3-ft., as No. 16, 40s.; a 2-ft. 6-in. do. do.,
35s.; a 3-ft. upright case, as fig. 163, 65s.;
a 12-ft. counter case, ebonized, 8l. 10s.;
sponge cases, fig. 90 and 92, 5l.; a large
quantity of other fittings, &c., &c., &c.
E. Natali, 213 Old Street, E.C.

26 1-gal. black uprights; 40 40-oz. W.M. blue
jars, painted tin covers; 31 40-oz. blue
stoppered N.M.; 34 N.M. stoppered white
pints; 33 ditto ditto quarts; one gallon gra-
duated receiver and two percolators; 9
6-lb. blue and white upright jars and
covers; one leech jar. Turner, Chemist,
Scarborough.

Minor Students.—50 questions asked of a suc-
cessful candidate at last Minor, 2s.; 30 pre-
scriptions given to dispense at the "Minor,"
2s.; 50 illegible prescriptions, 2s. 6d.; 80
mounted indigenous plants, 5s.; Tully's
"Postal System" lent to copy, 5s.
"Chemist," care of Mr. Edwards, London
House, Petham, Canterbury.

Quaint old dictionary (Bailey's), containing
remarkable (and unparliamentary) words
and their derivations, scarce, 10s.; "History
of the Devil," an extraordinary work,
scarce, 7s. 6d.; Bell on "Cow Pox," coloured
plates, scarce, 7s. 6d., or exchange for
round sauce bottles. "Medicus," New-
ferry, Birkenhead.

Nest of drawers, window enclosures, glazed cases,
shop jars, all sizes and colours, show bottles,
specie jars, black store bottles, shelving, and
every requisite; also various medical looks,
surgical instruments; also tobaccoists'
handsome show cases, jars, &c.; all cheap,
to effect a clearance. Handsome vase of
satin flowers, price 3l. H. E., 294 Old Kent
Road.

Two counters, mahogany tops, 4½ yards long;
glass case, 6 feet by 3; 1 ditto, about 8 feet by
4; enclosure to window, 9 feet by 4; upright
glass case, 4 feet by 6; 2 dozen 40-oz. wide
mouth stoppered bottles; 2 dozen 40-oz.
narrow ditto ditto; 2 dozen large blue jars;
2 dozen small ditto; 8 dozen wide-neck
20-oz. bottles; 10 dozen narrow ditto 20-oz.
ditto; 1 dozen blue syrup bottles; 2½ dozen
10-oz. narrow-neck bottles; 2 dozen 10-oz.
wide-neck ditto; nest of 100 mahogany
drawers with glass knobs, with all the
general effects. Apply to Mr. J. P. Parkes,
care of Evans, Lescher & Evans, 60 Bartholo-
mew Close, E.C.

Allen's lung balsam, Cathery's plate powder, Stanley's cerusino carbolic sachets, celery salt, Featherston ivory stopping, pedeficum, Jussien's argarion, Vestris' face powder, printing type, White's "Farriery," Drnett's "Vnde Meeum," Liebig's "Chemistry," Noad's "Lectures," Parnel's "Analysis," copper still worm tub, dispensary. Cooke, chemist, Wandsworth.

Only eight 5-lb. coppers left (new); super essence lemon, 7s. 3d. lb., to clear; two casks Jamaica honey, 47s. 6d. cwt.; cupri sulph. opt., 24s. cwt.; acid acetic, B.P., 28s.; burnt sugar, 38s., perfectly soluble; six cases finest seconds castor oil, 5½d.; finest palo oak varnish, 6s. 6d.; essence pears, 2s. 9d.; pice apple, 3s.; strawberry, 3s.; fol. scuna, 4½d.; chlorodyne, 6s. 9d.; pulv. rhei, E.I., 1s. 9d.; chloroform, warranted B.P., 4s.; ether meth., 1s. 2d. Samples two stamps. Quinine sulph., B.P., 11s. 4d.; cerasine wax substitute, 10½d. lb.; acid carbolic, pure B.P., 1s. 10d.; Farrishe's chemical food, 11d. lb.; good bright glue, 34s.; French ditto, 46s. Sowerby, Chemist, Middlesborough.

Sponge case, as figs. 90 and 92; a 5 ft. 6 in. plate glass counter case, as fig. 99, 6l.; a 5 ft. 9 in., as 96, 5l.; a 3 ft. 10 in., as 101, 80s.; a 3 ft. 6 in., as fig. 100, 75s.; a 6 ft., as 105, 6l. 10s.; a 5 ft., as 105, 5l.; several others, larger and smaller; a 7 ft. dispensing screen, glass case at each side, with looking-glass centre, with marble slab in front, silvered glass backs to cases, and shifting shelves inside, fretwork on tablets on top shelves at back for dispensing bottles, all plate glass, in first-rate condition, 9l.; a 6 ft. do. do., 9l.; a 6 ft., as 164, 7l.; a 4 ft., as 163, 60s.; desk and case, as fig. 21, 65s.; a desk on stand, with label drawer and paper drawer under, in first-class condition, a bargain; 168 ft. run of mahogany-fronted shelves, 6d. per foot, &c., &c. E. Natali, 213 Old Street, E.C.

1,000 shop jars, 500 wedgewood mortars, 20 pill machines, fancy jars, 7 specie jars 27 in. high, royal arms glass, gold covers, equal to new, 90s. pair; several other pair, from 50s.; junibe jars, labelled, 2s. each; scales, fig. 1, 25s.; fig. 7, 15s.; fig. 4, 15s.; 1 each nest of mahogany drawers, glass knobs, and newly labelled, 4 ft., 65s.; 8-ft. do. do. to match, 6l. 10s.; 12-ft. do. do., 9l. 10s.; a nest drawers, mahogany fronted, 26 in. long, a do. do. 43 in. long, a do. do. 78 in. long, all labelled, 1s. 9d. per drawer; 11-ft. 9 run of drawers and cupboards, pine-painted oak, gold labelled, 7l. the lot; 1 each mahogany-top counter, 6 ft., 7 ft. 6 in., 9 ft. long; a 6-ft. counter, with glass case on top, 9 ft. high; a 4-ft. 9 dispensing counter, with screen on top. E. Natali, 213 Old Street, E.C.

A quantity of dental instruments, including show-case, lathe tools, teeth vulcaniser, specimens, cost over 35l., price 18l.; also a fine-tone barrel pinnoforte, quite modern, playing 10 airs, a magnificent instrument, suitable for either drawing-room or studio, cost 50l., price 25l.; a patent pill machine, cost 10l., price 6l. 10s., nearly new; 30 dozen catheters, new, 3s. per dozen; first-class student's microscope, with English objective, polariscope objects, &c., cost 14l., price 9l.; a fine oleograph in handsome gilt frame, 4 ft. by 3 ft., subject, "The Village School," cost 6l. 6s., price 3l.; a small plate electrical machine, with accessories in case, cost 3l. 15s., price 2l.; a japanned jar gasometer, 2 gallons capacity, price 7s. 6d. The above lots must be sold in consequence of alterations; they are all genuine bargains. Apply, Chemists, 151 Hoxton Street, N., London.

Fresh botanical specimens of medicinal and other plants, including aconite, savin, belladonna, broom, dulcamara, digitalis, conium, larkspur, with others, each described with distinguishing characteristics, 5s. per set of 15, separately, 6d. each; reagent labels, showing at glance how to prepare the reagents for practical analysis, decompositions which occur (expressed by equations), symbolic formulæ, with other useful information, 1s. 6d. per sheet; 50 questions asked at Minor this month, 2s. Saunders, 79 Gaisford Street, N.W.

Three 2-doz. 5-gr. pill machines; one 2-doz. 4-gr. ditto, with marble slab; one 1-doz. 5-gr. pill machine; one pastille machine; all have been done up and are equal to new; 4 tincture presses, as fig. 1 and 2 Maw's; 1 tin water bath, as fig. A Maw's; 18 doz. new 20-oz. W & N M gold-labelled shop bottles, 12s. doz.; 22 doz. new 30-oz. ditto, 15s. 6d. doz.; quantity blue syr. bottles, patent oil bottles, &c., cheap; 54 1 and 2-lb. gold-labelled new junibe jars, as fig. 1 Maw's, 2s. 3d. and 2s. 8d. each; handsome show jars, as fig. A and D. Maw's; handsome specie jars; quantity ointment and extract jars, labelled. Lloyd Rayner, 333 Kingsland Road, London, N.

Dispensing screen, second-hand, plate-glass, with mirrors at back of case and in the centre, length 78 in., height 30 in., very handsome, 110s.; also one ebonite, 32 in. high, tablet on top, plate-glass and mirror centre, 70 in. long, 130s.; also one 54 in. long, mahogany, with tablet on top, dispensing department, 32 in. high, 50s.; also dispensing screen, very handsome, 9 ft. long, marble slab and mirror in centre, 10l. 10s.; mahogany wall-case, with cupboards under, painted and grained, 7 ft. long, 9 ft. high, 8l. 10s.; new wall-case of pine-stained mahogany and polished, 6 ft. long, 9 feet high, 7l.; mahogany desk and case, 30 in. long, 50s.; 1 also, 37s. 6d.; 3 tablets, total length, 8 ft., in new frames, "Prescriptions Accurately Dispensed;" mahogany-top counter, 9 ft. long, 70s.; pine case, stained mahogany and polished, 44 by 15 in., 17s. 6d.; mahogany counter case, 57 by 17 inches, 25s.; nest of 20 drawers for counter, 35s.; 2 specie jars in fair condition, 24 in. high, and 28 in. to top of lid, 35s. each; about 100 second-hand cases, bent and straight; second-hand jars and bottles, to fit a small shop; a bent front case, 42 in. long, 9 in. wide, and shelf at back, plate-glass, 35s. Parties fitting write for lists. Richard Tomlinson, shop-fitter, 15 St. Paul's Square, Birmingham.

Mahogany-top counters, with deal panel fronts, re-grained mahogany or maple, as Maw's fig. 138 to 142, equal to new, if 3 ft. long 30s., 4 ft. long, 38s., 6 ft. long, 55s., 8 ft. long, 72s., 10 ft. long, 85s.; 12 ft. long, 5l.; one 6 ft. long, one 7 ft. long, one 7 ft. 8 long, handsome mahogany dispensing plate-glass case screens as 163, 164 Maw's, &c.; upright mahogany counter case, with desk 50s.; handsome 2½ feet long, 2½ feet high, mahogany desk screen, with panchled and moulded front, plate-glass tablet, written in gold, "Prescriptions Carefully Prepared," and mahogany cornice on top, the desk with flap, and fitted inside with drawers, &c.; 2½ ft. long upright mahogany plate-glass case, as fig. 39 Maw's, with or without desk; 8 handsome mahogany wall-cases, with and without cupboards under, as 198 to 202 Maw's, 4 ft. long, 4 ft. 6 long, 5 ft. long, 6 ft. long, 8 ft. long, 9 ft. long, 10 ft. long, 12 ft. long; one 3 ft. 6 long, 8½ ft. high, grained mahogany wall-case, with glazed folding doors, shelves enclosed, and with cupboard under, with shelf enclosed and glazed folding doors, with cornice on top; two 2-feet long mahogany bent-glass counter-cases, mirror backs, equal to new, 20s. each; 10 nests mahogany-fronted gold labelled shop drawers, all sizes, from 2 to 16 ft. long; 8 handsome nests mahogany-fronted gold labelled shop drawers, with locks under shelving and cornice above, forming complete fittings, as fig. 186 to 191, and fig. 192 to 197, all sizes, from 4 ft. to 18 ft. long; one 10 ft. long, one 12 ft. long, one 13 ft. long nests deal stained mahogany-fronted gold labelled shop drawers, with locks under and shelving above. Lloyd Rayner, 333 Kingsland Road, London, N.

14 lbs. liq. sarzæ, B.P., 6s.; 6 lbs. potass. iod. 12s.; 30 oz. ferri. citr. c. quina, 12s. 3s. oz.; 4 lbs. pulv. creta. arom., 12s. 3s. lb.; 200 lbs. aloes hepat. opt., 6d. lb. 24 oz. quina disulph. Savory's, 12s. 6d. 8 lbs. pulv. creta. arom., c. opio, 30 No. 2 flax lint, 1s. 9d.; 60 lbs. ol. camexot., 2s. 1 have the above surplus to dispose of. J. Wiggin, Chemist, Ipswich.

WANTED.

Plated gun metal pessary mould for six price. Nemo, 110 Cheltenham Road, B. Tokens of last century; send list. W. chemist, Devonport.

Several 6 and 12-dozen Burrow's rack mineral waters. Dray, chemist, Dunfermline.

Pharmaceutical Journals, April 27 to 3 inclusive. Churchill, Lower Norwood.

Lowest cash price for "Quin's Anatomy," 1st edition. 27/171.

Chemist and Druggist for March, 1878, August, 1876. 8/177.

A registered 6 or 8 gal. benzoline cistern. Bodeu, Litchurch, Derby.

A 16-inch tooth-brush case as Maw's & Forbes, chemist, Reigate.

Two specie jars, 29 inches high; also 13/181.

A soda-water stand, fig. 62 Maw's List. C. Long Sutton, Lincolnshire.

Sheet-iron oil cisterns, about 100 gallons; case, 8 feet long, 6 feet high. Field, W.

Lbss. or less of best English creosote, a two years old, price no object. Send sample to J. C. Shenstone, Colchester.

Redwood's Supplement to the *Pharmacopoeia*, latest edition. Price to Stratton, 1 St. Norwich.

A few copies of the *Chemist and Druggist*, October, 1870. Apply to Publisher and *Druggist*, 44A Cannon Street, London.

Proctor's "Pharmacy," in good condition. Walter Stott, 17 Albermarle Road, borough.

Acton's "Diseases of the Urinary and Genital Organs," third edition preferred; 6/177.

Chemist and Druggist for July, 1874. Nov. 1875, February, 1877, and indices for 1876, and 1877. Highmoor, 32 N. Square, Leeds.

FORMULÆ.

Essence of ginger miscible with water without turbidity, perfectly transparent, 5s. 17.

An exquisite perfume, will command a tentative sale wherever introduced, 3s. 17.

Finest non-corrosive blue-black writing ink, no precipitate, and never fades, 17/23.

Rat exterminator, never fails to clear houses, ships, factories, &c., of rats at night, 10s. 6d. Walker, 13 Ann St. Dundee.

Pill-Coating Formulæ. Wanted, a general formulæ for above, to give a polished surface. As the formulæ will be tested payment only practical hands need 33/196.

Furniture paste, very superior, cleans and brilliant gloss on polished or other furniture, &c., 2s. 6d.; baking powder (original), 10s., 2s. 6d. The excellence of these preparations secures for them a good sale. Reference or sample post free. H. Harro South Street, Goolie.

ADDRESSES WANTED.

The address of Mr. Edwin Williams, late of Gwydyr Street, Cambridge. 11.

The address of W. J. Priestley, chemist's assistant, Chas. Weston, chemist, or to Mr. P. tailor, Ventnor, Isle of Wight.

Mr. Harrop (Middleton) writes: I may out flattery, say that every advertisement, and that I have sent under head of "Extra Column," has proved satisfactory, both to my and purchaser; and it is a capital medium for disposing either of surplus stock or property which have not a very ready sale in the particular neighbourhood of the advertiser.

Mr. Higginson (Birkenhead) writes to say he advertised an Herbarium in the "Extra Column" in April last. He received three orders and one Post-office order, all from distant towns, for it.



anticipations of relief from political trouble have infused much better spirit into all departments of commerce. buoyancy of the stock markets during the past few weeks manifested the eagerness of investors, and though it can be said that trade generally has yet indicated the influence of the better state of things by figures, there are nevertheless appearances which may be described as promising.

Board of Trade Returns for May were disappointing the improvement manifested in April. That month showed an advance in our exports amounting to 1,120,482*l.*; in May, however, this advance was more than dissipated, as the exports for the month were 1,296,064*l.* less than in May 1877. The figures for the five months ending May 31 are as follows:—

	1878.	1877.	1876.
	£	£	£
...	15,423,911	15,946,080	16,654,512
...	14,896,320	14,393,745	16,482,505
...	16,756,397	16,929,930	17,739,101
...	16,327,059	15,206,577	15,430,177
...	16,165,075	17,461,139	17,055,504
...	79,568,762	79,928,471	83,361,799

Chemicals the decline noticed last month continued for a long time so longer and prices became exceedingly low—so low that it was impossible to believe they could be remunerative to the manufacturers. Of late there has been more tendency to firmness and it is certain that stocks have been considerably reduced during the spring, for the demand has been fairly up to the average. There is, however, still sufficient desire for trade to keep prices at their recent level, and it will require an undue development of business to make the heavy chemical a really profitable one. Bicarbonate of soda is now at under 10*s.* per cwt., and crystals at less than 3*l.* 10*s.* per cwt. These prices are really astonishing and must leave a slight margin indeed for profit. Anticipations of peace have caused a weakness in saltpetre, and quinine has likewise been pushed on the market probably from a similar cause. Dealers of the latter have evidently become nervous, as is evidenced by large quantities which have been offered by auction during the past month. Iodine has been steady at its recent advance, but for the moment makers seem satisfied with the improvement they have accomplished. The price of citric remains at recent quotations, which are very bad. The trade with America for this product seems to have become almost extinguished, as it is manufactured there on a large scale. Cream of tartar is firm at a slight advance. Bromine bromides have advanced.

Drug markets have been quiet and the demand has been moderate. A scarcity in almonds has caused a slight advance in the price of the oil, which is likely to be maintained. Castor oil keeps up its firm appearance, and according to reports from Calcutta it does not seem likely to decline. The Nor-

wegian cod fisheries have been deficient during the past season; fine qualities are said to be of more than average scarceness. A very moderate advance may be expected in this product. Barks have been readily bought, foreign houses being the chief competitors for those put up for auction. Opium has not advanced, notwithstanding the confident anticipations of "some people." The possible changes in Asia Minor which may be effected by the Berlin Congress will probably have some effect on this and other products of the country. Some speculation has been manifest in shellac, which has advanced during the month and is now firmly held. High prices have been paid for fine qualities of musk.

The efforts of the Italian holders of olive oil seem to have quite failed to cause the anticipated improvement in their property. The supply has been quite sufficient to meet all demands in England, and no one has been tempted into speculation. Linseed has declined, but is now firmer. Spermin is somewhat cheaper. Cotton seed and lard have both declined. There has been more demand for American turpentine, which has advanced 1*s.* 6*d.* per gallon within the past ten days. Petroleum keeps singularly steady.

	May 31 Stocks		May 31 Imports		May 31 Deliveries	
	1878	1877	1878	1877	1878	1877
Aloes.....cs	1,624	1,958	1,112	820	1,530	1,226
".....kegs	14	21	1	—	1	4
".....gourds	1,279	1,910	64	1,309	1,094	1,068
Aniseed, Star.....chts	935	1,566	593	250	619	414
Arrowroot.....cks	16,711	12,397	9,169	8,040	5,769	5,449
".....bxs & tins	7,809	6,575	4,984	5,750	3,749	3,359
Balsam.....cks, &c.	114	410	21	268	95	214
Bark, Medicinal.....cks, &c.	878	477	1,312	1,379	1,603	1,053
".....srns, &c.	7,139	8,409	15,013	10,181	18,670	10,448
".....Tanners'.....tns	3,712	2,998	2,992	3,539	3,291	5,291
Borax.....pkgs	912	1,172	—	235	121	464
Bees' Wax.....bls & srns	503	359	173	71	224	126
".....cks & cs	1,338	1,122	698	1,019	731	867
".....cakes	53	107	186	88	141	100
Wax Japan vegetable pkgs	5,652	4,912	618	3,261	1,280	2,965
Campher.....pkgs	4,993	5,767	3,524	2,522	3,036	2,835
Cardamoms.....chts	423	766	170	311	318	376
Cocculus Indicus bgs, &c.	2,069	2,235	—	—	367	154
Colombo root.....pkgs	643	883	127	267	101	100
Cream of Tartar.....cks	102	130	106	144	116	107
Cubeb.....bgs	184	266	30	30	140	44
Dragonsblood.....chts	92	116	32	115	78	59
Galls, E.I.....cks & cs	3,061	3,892	2,618	5,129	2,719	2,718
Mediterranean.....sks	1,404	832	1,236	779	446	404
Gum—						
Ammoniac.....pkgs	505	541	58	130	36	77
Animi Copal.....	8,278	4,376	2,911	3,010	2,773	3,455
Arabic, Barbary.....	1,003	1,103	892	1,244	910	1,147
Turkey.....	377	268	690	478	782	537
E.I.....	2,470	1,720	2,598	1,488	2,300	1,346
Assafoetida.....	296	532	188	390	194	210
Benjamin.....	531	1,112	332	1,127	765	612
Damar.....	1,027	1,063	977	244	1,043	1,326
Galbanum.....	25	22	—	—	10	10
Gamboge.....	148	172	120	134	138	171
Guaiaicum.....	36	29	101	76	102	56
Kino.....	11	16	3	5	4	7
Kowrie.....tns	928	1,106	698	1,010	764	713
Mastic.....pkgs	148	108	60	18	36	20
Myrrh, E.I.....	262	286	93	221	91	190
Olibanum.....	3,544	5,139	4,370	6,726	3,783	3,036
Sandarac.....	1,027	635	1,175	846	626	727
Senegal.....tns	18	14	11	2	3	6
Tragacanth.....pkgs	1,469	421	1,700	607	428	247
Ipecacuanha.....cks & bgs	225	73	226	94	313	175
Jalap.....bls	480	613	70	144	127	181
Nux Vomica.....pkgs	4,160	1,872	4,131	571	1,218	210
Oil—						
Castor.....cks	1	—	—	4	7	4
".....cs	2,452	7,240	5,173	9,535	6,239	7,397
Palm.....tns	226	161	695	997	985	1,343
Cocanut.....	1,691	3,601	2,300	5,411	3,367	4,714
Olive.....cks, &c.	849	676	1,498	1,808	1,965	1,648
Aniseed.....cs	202	278	350	205	385	146
Cassia.....	662	671	7	353	77	81
Opium.....chts, &c.	1,591	960	—	—	—	—
Rhubarb.....chts	1,175	658	839	375	682	665
Sarsaparilla.....bls	1,116	1,119	861	1,152	970	948
Senna.....bls, &c.	2,412	2,862	439	2,006	1,267	1,685
Shellac.....cs, &c.	43,176	33,015	18,454	19,945	14,950	13,229
Terra Japnica, Gambier tns	3,730	506	7,359	2,867	5,413	3,222
Cutch.....	2,209	2,676	807	837	929	881
Turmeric.....	1,499	794	1,681	867	1,164	707

Monthly Price Current.

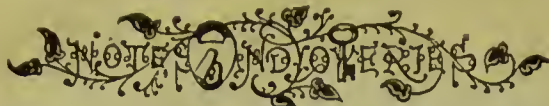
The prices quoted in the following list are those actually obtained in Mining Lane for articles sold in bulk. Our Retail Subscribers must not expect to purchase at these market prices, but they may draw from them useful conclusions respecting the prices at which articles are offered by the Wholesale Firms.

CHEMICALS.		1878.	1877.
ACIDS—		s. d.	s. d.
Acetic	per lb.	0 2½ to 0 0	0 2½ to 0 0
Citric	"	2 2 .. 0 0	2 8 .. 0 0
Hydrochloric	per cwt.	5 0 .. 7 0	4 0 .. 7 0
Nitric	per lb.	0 4½ .. 0 0	0 4½ .. 0 0
Oxalic	"	0 4 .. 0 5	0 5 .. 0 0
Sulphuric	"	0 0½ .. 0 1	0 0½ .. 0 1
Tartaric crystal ..	"	1 4½ .. 0 0	1 5½ .. 0 0
powdered ..	"	1 4½ .. 0 0	1 5½ .. 0 0
ANTIMONY ore	per ton	240 0 .. 300 0	240 0 .. 300 0
crude ..	per cwt.	37 0 .. 0 0	47 0 .. 48 0
star	"	50 0 .. 5 0	25 6 .. 26 6
ARSENIC, lump	"	26 0 .. 0 0	9 0 .. 10 0
powder	"	8 6 .. 9 3	9 9 .. 10 0
BRIMSTONE, rough ..	per ton	110 0 .. 115 0	115 0 .. 120 0
roll ..	per cwt.	9 0 .. 10 6	11 9 .. 13 6
flour	"	11 6 .. 13 6	0 10 .. 0 10½
IODINE, dry	per oz.	1 0 .. 0 0	8 6 .. 0 0
IVORY BLACK, dry ..	per cwt.	8 6 .. 0 0	1 10 .. 0 0
MAGNESIA, calcined ..	per lb.	1 10 .. 0 0	145 0 .. 0 0
MERCURY	per bottle	140 0 .. 0 0	23 3 .. 24 3
MINIUM, red	per cwt.	19 6 .. 19 9	35 0 .. 35 6
orange ..	"	31 6 .. 0 0	3 9 .. 0 0
PRECIPITATE, red ..	per lb.	3 6 .. 0 0	3 8 .. 0 0
whito ..	"	3 5 .. 0 0	0 0 .. 0 0
PRUSSIAN BLUE ..	"	0 0 .. 0 0	0 0 .. 0 0
SALTS—			
Alum	per ton	125 0 .. 130 0	145 0 .. 150 0
powder	"	145 0 .. 0 0	157 6 .. 160 0
Ammonia:			
Carbonate	per lb.	0 6½ .. 0 6½	0 5 .. 0 5½
Hydrochlorate, crude,			
white	per ton	600 0 .. 720 0	670 0 .. 720 0
British (see Sal Am.)			
Sulphate	per ton	405 0 .. 415 0	385 0 .. 390 0
Argol, Cape	per cwt.	75 0 .. 90 0	75 0 .. 92 6
Red	"	58 0 .. 70 0	57 0 .. 72 0
Oporto, red ..	"	32 6 .. 33 0	0 0 .. 0 0
Sicily ..	"	60 0 .. 65 0	0 0 .. 0 0
Ashes (see Potash and Soda)			
Bleaching powd ..	per cwt.	5 6 .. 5 9	6 3 .. 0 0
Borax, crude	"	27 0 .. 38 0	30 0 .. 40 0
British refnd ..	"	36 0 .. 37 6	40 0 .. 0 0
Calomel	per lb.	3 1 .. 0 0	3 4 .. 0 0
Copper:			
Sulphate	per cwt.	18 6 .. 18 9	21 6 .. 22 6
Copperas, green ..	per ton	50 0 .. 55 0	55 0 .. 65 0
Corrosive Sublimate p. lb.		2 6 .. 0 0	2 9 .. 0 0
Cr. Tartar, French, p. cwt.		99 0 .. 0 0	102 6 .. 0 0
brown ..	"	80 0 .. 0 0	90 0 .. 0 0
Epsom Salts	per cwt.	4 3 .. 6 0	4 9 .. 5 6
Glauber Salts	"	3 0 .. 4 6	3 6 .. 4 6
Lime:			
Acetate, white, per cwt.		11 0 .. 20 0	11 0 .. 20 0
Magnesia: Carbonate ..		47 6 .. 0 0	47 6 .. 0 0
Potash:			
Bichromate	per lb.	0 3½ .. 0 3½	0 4½ .. 0 0
Carbonate:			
Potashes, Canada, 1st			
sort	per cwt.	23 6 .. 0 0	22 3 .. 22 6
Pearlshes, Canada, 1st			
sort	per cwt.	32 0 .. 0 0	37 6 .. 0 0
Chlorate	per lb.	0 6½ .. 0 6½	0 9 .. 0 0
Prussiate	"	0 10 .. 0 10½	0 11 .. 0 11½
red ..	"	1 8 .. 1 9	2 1 .. 2 2
Tartrate (see Argol and Cream of Tartar)			
Potassium:			
Bromide		2 6 .. 0 0	0 0 .. 0 0
Chloride	per cwt.	6 6 .. 0 0	0 0 .. 0 0
Iodide	per lb.	15 0 .. 15 6	13 0 .. 0 0
Quinino:			
Sulphate, British, in			
bottles	per oz.	13 0 .. 0 0	15 6 .. 16 0
Sulphate, French ..	"	12 0 .. 0 0	14 6 .. 15 0
Sal Acetate	per lb.	0 7 .. 0 0	0 7½ .. 0 8
Sal Ammoniac, Brit. cwt.		42 0 .. 43 0	44 0 .. 45 0
Saltpetre:			
Bengal, 6 per cent. or			
under	per cwt.	19 9 .. 20 3	24 0 .. 25 0
Bengal, over 6 per cent.			
per cwt.		29 0 .. 19 6	22 6 .. 23 6
British, refined ..	"	24 9 .. 25 9	27 6 .. 28 6
Soda: Bicarbonate, p. cwt.		9 7½ .. 9 9	11 3 .. 0 0
Carbonate:			
Soda Ash ..	per deg.	0 0 .. 0 0	0 1½ .. 0 1½
Soda Crystals per ton		67 6 .. 70 0	82 6 .. 0 0
Hyposulphite, per cwt.		0 0 .. 0 0	0 0 .. 0 0
Nitrate	"	16 0 .. 0 0	14 6 .. 15 0
SUGAR OF LEAD, White cwt.		37 6 .. 0 0	37 0 .. 38 0
Brown, cwt.	"	26 6 .. 0 0	27 0 .. 0 0
SULPHUR (see Brimstone)			

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VERDIGRIS		per lb.	s. d.
VERMILION, English	"	2 8 .. 0 0	1 1 to 1 5
China	"	2 5 .. 0 0	3 0 .. 1 5
DRUGS.			
ALOE, Hepatic	per cwt.	80 0 .. 180 0	70 0 .. 110 0
Socotrine ..	"	85 0 .. 200 0	65 0 .. 175 0
Cape, good ..	"	43 0 .. 41 6	47 0 .. 44 0
Inferior ..	"	35 0 .. 42 0	41 0 .. 44 0
Barbadoes ..	"	49 0 .. 160 0	59 0 .. 1 1
AMBERGRIS, grey	oz.	80 0 .. 90 0	75 0 ..
BALSAM—			
Canada	per lb.	0 9 .. 1 2	1 1 .. 1 1
Capivi	"	1 6 .. 1 6½	1 9 .. 1 1
Peru	"	4 9 .. 0 0	5 0 .. 1 1
Tolu	"	3 0 .. 3 3	7 0 ..
BARKS—			
Cassia alba	per cwt.	18 0 .. 22 0	21 0 .. 24 0
Cascarilla	"	16 6 .. 23 0	17 0 .. 24 0
Peru, crown & grey per lb.		1 0 .. 2 10	1 6 .. 2 10
Calisaya, flat ..	"	2 6 .. 4 6	2 6 .. 4 6
" quill ..	"	4 0 .. 8 0	2 6 .. 4 6
Carthagena ..	"	1 4 .. 4 2	4 6 .. 8 0
Columbian ..	"	1 6 .. 6 9	1 6 .. 8 0
E. I. ..	"	1 2 .. 4 10	1 8 .. 8 0
" good & fine ..	"	5 0 .. 12 7	5 6 .. 8 0
Pitayo	"	0 6 .. 1 6	0 6 .. 1 6
Red	"	3 3 .. 9 0	2 3 .. 9 0
Buchu Leaves ..	"	0 2½ .. 1 3	0 2½ .. 1 3
CAMPOR, China	per cwt.	75 0 .. 79 0	92 6 .. 97 6
Japan ..	"	81 6 .. 0 0	97 6 .. 1 3½
Refin. Eng. per lb.		1 1½ .. 0 0	2 6 .. 2 6
CANTHARIDES	"	2 2 .. 5 0	5 0 .. 5 0
CHAMOMILE FLOWERS p. cwt.		50 0 .. 200 0	50 0 .. 200 0
CASTOREUM	per lb.	9 0 .. 30 0	9 0 .. 30 0
DRAGON'S BLOOD, p. cwt.		100 0 .. 280 0	100 0 .. 280 0
FRUITS AND SEEDS (see also Seeds and Spices).			
Anise, China Star per cwt.		75 0 .. 80 0	92 0 .. 100 0
Spanish, &c. ..	"	34 0 .. 50 0	30 0 .. 50 0
Beans, Tonquin	per lb.	1 9 .. 5 0	1 9 .. 5 0
Cardamoms, Malabar			
good	"	5 0 .. 6 3	4 6 .. 6 3
inferior ..	"	1 9 .. 4 10	1 0 .. 4 10
Aleppy ..	"	2 0 .. 5 6	3 2 .. 5 6
Madras ..	"	2 8 .. 4 6	2 8 .. 4 6
Ceylon ..	"	4 6 .. 5 0	3 6 .. 5 0
Cassia Fistula	per cwt.	80 0 .. 89 0	10 0 .. 89 0
Castor Seeds ..	"	0 0 .. 0 0	5 0 .. 0 0
Cocculus Indicus ..	"	7 9 .. 10 0	9 0 .. 10 0
Colocynth, apple ..	per lb.	1 0 .. 1 9	0 0 .. 1 9
Croton Seeds	per cwt.	26 0 .. 31 0	39 0 .. 39 0
Cubebs	"	32 0 .. 35 0	27 0 .. 35 0
Cummin	"	20 0 .. 35 0	11 0 .. 35 0
Dividivi	"	11 0 .. 16 0	12 6 .. 16 0
Fennugreek ..	"	6 0 .. 12 0	8 0 .. 12 0
Guinea Grains ..	"	0 0 .. 0 0	0 0 .. 0 0
Juniper Berries ..	"	3 3 .. 8 0	8 0 .. 8 0
Nux Vomica ..	"	9 6 .. 13 0	13 0 .. 13 0
Tamarinds, East India ..	"	12 0 .. 19 0	10 0 .. 19 0
West India ..	"	25 0 .. 30 0	16 0 .. 30 0
Vauilla, large	per lb.	20 0 .. 27 0	19 0 .. 27 0
inferior ..	"	15 0 .. 19 0	12 0 .. 19 0
GINGER, Preserved, per lb.		0 5½ .. 0 6	0 4½ .. 0 6
HONEY, Chili	per cwt.	30 0 .. 50 0	32 0 .. 50 0
Jamaica ..	"	35 0 .. 41 0	0 0 .. 41 0
Australian ..	"	0 0 .. 0 0	0 0 .. 0 0
IPECACUANHA	per lb.	5 2 .. 5 7	6 5 .. 5 7
ISINGLASS, Brazil ..	"	2 9 .. 4 9	2 8 .. 4 9
Tongue sort ..	"	3 8 .. 5 6	3 2 .. 5 6
East India ..	"	1 8 .. 5 1	2 0 .. 5 1
West India ..	"	4 0 .. 4 10	3 10 .. 4 10
Russ, long staple ..	"	8 0 .. 15 0	8 0 .. 15 0
" inferior ..	"	0 0 .. 0 0	0 0 .. 0 0
" Simovia ..	"	1 6 .. 3 0	2 2 .. 3 0
JALAP, good	"	0 9 .. 0 11	0 8 .. 0 11
infer. & stems ..	"	0 7 .. 0 8	0 7½ .. 0 8
LEMON JUICE	per degree	0 1 .. 0 1½	0 1 .. 0 1½
LIME JUICE	per gall.	0 0 .. 0 0	0 0 .. 0 0
LIQUORICE, Spanish per cwt.		34 0 .. 39 0	34 0 .. 39 0
Liquorice Root ..	"	0 0 .. 0 0	0 0 .. 0 0
MANNA, flaky	per lb.	3 6 .. 4 0	0 0 .. 4 0
small	"	1 4 .. 1 6	0 0 .. 1 6
MUSK, Pod	per oz.	21 0 .. 62 0	13 6 .. 62 0
Grain	"	20 0 .. 55 0	45 0 .. 55 0
OILS (see also separate list)			
Almond, expressed per lb.		1 10 .. 0 0	1 4 .. 0 0
Castor, 1st pale ..	"	0 5½ .. 0 5½	0 4½ .. 0 5½
second ..	"	0 5 .. 0 5½	0 3½ .. 0 5½
Cod Liver	per gall.	3 11 .. 5 3	4 6 .. 5 3
Croton	per oz.	0 2½ .. 0 2½	0 2½ .. 0 2½
Essential Oils:			
Almond	per lb.	25 0 .. 0 0	20 0 .. 0 0
Anise-seed	"	7 0 .. 7 2	6 3 .. 7 2
Bay	per cwt.	0 0 .. 0 0	65 0 .. 0 0
Bergamot	per lb.	10 0 .. 15 0	10 0 .. 15 0
Cajuput	per bottle	3 0 .. 3 6	3 0 .. 3 6
Caraway	per lb.	9 0 .. 9 3	9 0 .. 9 3
Cassia	"	2 9 .. 0 0	3 9 .. 0 0
Cinnamon	per oz.	4 3 .. 5 0	2 6 .. 5 0
Cinnamon-leaf ..	"	0 1½ .. 0 0	0 2½ .. 0 0
Citronelle	"	0 21 .. 0 0	0 1½ .. 0 0
Clove	"	7 6 .. 0 0	8 9 .. 0 0
Juniper	"	0 0 .. 0 0	0 0 .. 0 0
Lavender	per lb.	1 8 .. 7 0	1 8 .. 7 0
Lemon	"	5 0 .. 8 6	7 0 .. 8 6
Lemongrass	per oz.	0 2½ .. 0 0	0 2½ .. 0 0

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	s.	d.		s.	d.		s.
Scental Oils, continued:—							
Neroli.....per oz.	3	0	to 6	3	0	to 6	
Nutmeg.....per lb.	0	4	.. 0 4	0	5	.. 0 5	
Orange.....per lb.	4	3	.. 7	6	0	.. 9	
Otto of Roses.....per oz.	35	0	.. 44	16	0	.. 22	
Patchouli.....	1	6	.. 3	2	0	.. 3	
Peppermint:							
American.....per lb.	10	9	.. 12	13	0	.. 14	
English.....	24	0	.. 25	34	0	.. 35	
Rosemary.....	2	0	.. 2	2	0	.. 2	
Sassafras.....	2	3	.. 2	2	3	.. 2	
Spearmin.....	12	0	.. 15	12	0	.. 15	
Thyme.....	0	0	.. 0	0	0	.. 0	
Ice, expressed.....per oz.	0	6	.. 0 10	0	6	.. 0 10	
M, Turkey.....per lb.	16	6	.. 17	21	0	.. 22	
inferior.....	10	0	.. 12	10	0	.. 18	
SSIA (bitter wood) per ton	100	0	.. 130	100	0	.. 130	
BARB, China, good and							
Mid. to ord.....per lb.	1	6	.. 4	2	6	.. 3	
Dutch Trimmed.....	0	6	.. 1	0	9	.. 2	
TS—Calumba.....per cwt.	19	0	.. 51	32	0	.. 54	
ina.....	25	0	.. 30	30	0	.. 32	
iretta.....per lb.	0	3	.. 0	0	0	.. 0	
langal.....per cwt.	21	0	.. 22	24	0	.. 26	
ntian.....	9	0	.. 21	22	0	.. 24	
lelore.....	0	0	.. 0	0	0	.. 0	
ris.....	55	0	.. 65	26	0	.. 75	
litory.....	70	0	.. 76	70	0	.. 76	
lk.....per lb.	0	0	.. 0	0	0	.. 0	
latany.....	0	4	.. 0	0	4	.. 1	
eka.....	2	11	.. 3	3	6	.. 4	
ke.....	0	10	.. 1	0	6	.. 0	
RON, Spanish.....	20	0	.. 35	33	0	.. 37	
SP.....per cwt.	240	0	.. 300	0	0	.. 0	
APARILLA, Lima per lb.	0	6	.. 0	0	5	.. 0	
ayaquil.....	2	2	.. 2	1	10	.. 2	
ndras.....	0	11	.. 1	1	1	.. 1	
maica.....	1	2	.. 2	2	6	.. 3	
AFRAS.....per cwt.	9	0	.. 11	0	0	.. 0	
ALMONY, Virgin.....per lb.	0	0	.. 0	24	0	.. 30	
ond & ordinary.....	0	0	.. 0	6	0	.. 22	
A, Bombay.....	0	0	.. 0	0	1	.. 0	
anivelly.....	0	1	.. 1	0	1	.. 1	
andria.....	0	5	.. 1	0	5	.. 2	
MACETI, refined.....	1	4	.. 0	1	3	.. 1	
merican.....	1	3	.. 0	1	0	.. 1	
LLS.....	0	2	.. 0	0	1	.. 0	
S.	£ s.	£ s.		£ s.	£ s.		
ONACT drop .. per cwt.	1	18	.. 2	2	2	.. 2	
Imp.....	0	15	.. 1	0	17	.. 1	
white washed.....	13	15	.. 14	11	0	.. 12	
bold scraped.....	12	0	.. 13	9	15	.. 10	
sorts.....	8	10	.. 11	6	15	.. 9	
dark.....	2	15	.. 8	4	0	.. 6	
ic, E.I., fine							
ale picked.....	2	15	.. 3	2	15	.. 3	
srts. md. to fin.....	2	0	.. 2	2	5	.. 2	
garblings.....	1	5	.. 2	1	7	.. 2	
ey, pick. gd. to fin.....	5	0	.. 9	6	0	.. 9	
second & inf.....	3	0	.. 5	3	0	.. 5	
in sorts.....	2	10	.. 3	2	10	.. 3	
Gedda.....	1	13	.. 1	1	14	.. 3	
ARY, white.....	0	0	.. 0	0	0	.. 0	
brown.....	0	0	.. 0	1	15	.. 1	
ALIAN.....	2	2	.. 2	1	17	.. 2	
PEFIDA, em. to fin.....	0	13	.. 3	0	16	.. 4	
AMIN, 1st & 2nd.....	20	0	.. 70	27	0	.. 45	
matra 1st & 2nd.....	6	5	.. 17	6	5	.. 11	
3rd.....	2	18	.. 3	3	10	.. 5	
L, Angola red.....	6	0	.. 6	6	0	.. 6	
Benguela.....	4	0	.. 5	4	0	.. 5	
Sierra Leone, per lb.	0	6	.. 0	0	5	.. 0	
Manilla.....per cwt.	17	6	.. 23	15	0	.. 27	
AR, pale.....	74	6	.. 77	66	0	.. 75	
ingapore.....	63	0	.. 70	65	6	.. 74	
ORBIUM.....	9	0	.. 15	9	0	.. 15	
ANUM.....per lb.	0	3	.. 1	0	5	.. 1	
OG, pekd. pipe per cwt.	185	0	.. 260	200	0	.. 240	
ACUM.....per lb.	1	0	.. 2	1	3	.. 2	
.....per cwt.	81	0	.. 85	40	0	.. 50	
RE, rough.....	18	6	.. 43	21	0	.. 45	
scraped sorts.....	45	0	.. 55	47	0	.. 58	
TC, picked.....per lb.	4	0	.. 5	4	0	.. 5	
EH, gd. & fine per cwt.	150	0	.. 202	150	0	.. 200	
rd. to fair.....	100	0	.. 147	90	0	.. 145	
ANUM, p. drop.....	47	6	.. 55	49	0	.. 54	
amber & ylw.....	36	6	.. 46	45	0	.. 48	
garblings.....	12	0	.. 28	18	0	.. 26	
GAL.....	62	6	.. 95	65	0	.. 67	
ARAC.....	77	6	.. 95	95	0	.. 110	
LAC, Orange.....	72	0	.. 85	77	0	.. 92	
Liver.....	63	0	.. 70	70	0	.. 76	
.....	20	0	.. 21	20	0	.. 21	
ACANTH, leaf.....	240	0	.. 400	240	0	.. 400	
in sorts.....	65	0	.. 175	25	0	.. 175	
pale.....per tun	32	10	.. 33	35	0	.. 0	
yellow to tinged.....	30	10	.. 32	32	0	.. 34	
brown.....	28	0	.. 29	31	0	.. 31	
M.....	70	0	.. 72	83	0	.. 84	
.....	0	0	.. 0	0	0	.. 0	
.....	32	0	.. 0	38	0	.. 39	

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Oils, continued:—		£	s.	£	s.
WHALE, South Sea, pale, per tun		32	0	35	10
yellow „		31	0	33	0
brown „		28	0	31	0
East India, Fish „		0	0	25	0
OLIVE, Galipoli ...per ton		0	0	48	0
Gioja.....		0	0	48	0
Levant.....		0	0	45	10
Mogador.....		0	0	0	0
Spanish.....		49	0	0	0
Sicily.....		0	0	48	0
COCOANUT, Cochin..		51	0	41	5
Ceylon „		39	0	37	10
Mauritius „		38	0	32	0
GROUND NUT AND GINGELLY:					
Bombay		0	0	0	0
Madras		0	0	45	0
PALM, fine.....		39	0	38	10
LINSEED.....		26	15	29	15
RAPESEED, English, pale ..		33	10	36	1
brown.....		37	10	34	10
Foreign, pale ..		0	0	39	0
brown.....		0	0	0	0
COTTONSEED.....		30	10	31	0
LARD.....		40	0	50	0
TALLOW.....		30	10	30	0
	s. d.		s. d.		s. d.
TURPENTINE, American, eks.		2	6	2	6
French.....		0	0	0	0
PETROLEUM, Crude.....		0	0	0	0
refined, per gall.		0	9 ³ / ₄	0	10 ⁷ / ₈
Spirit.....		0	7	0	9 ¹ / ₂
SEEDS.					
CANARY.....per qr.		47	0	55	0
CARAWAY, English per cwt.		43	0	45	0
German, &c.....		48	0	49	0
CORIANDER		18	0	23	0
HEMP.....per qr.		0	0	0	0
LINSEED, English.....		0	0	53	0
Black Sea & Azof.....		48	6	0	0
Calcutta „		48	0	56	0
Bombay „		50	0	57	6
St. Petrsbrg., „		0	0	54	0
Mustard, brown...per bshl.		0	0	12	0
white.. „		13	0	13	0
POPPY, East India, per qr.		51	6	52	0
SPICES.					
CASSIA LIGNEA ..per cwt.		39	0	48	0
Vera		22	0	22	0
Buds		56	0	73	0
CINNAMON, Ceylon:					
1st quality.....per lb.		1	8	1	9
2nd do.		1	6	1	6
3rd do.		1	4	1	3
Tellicherry		0	0	0	0
CLOVES, Penang		1	7	2	2
Amboyna		1	3	1	4
Zanzibar.....		1	0	1	0 ¹ / ₂
GINGER, Jam., fine per cwt.		90	0	91	0
Ord. to good		48	0	54	0
African		24	6	28	0
Bengal.....		19	6	23	0
Malabar.....		0	0	30	0
Cochin.....		48	0	52	0
PEPPER, Blk, Malabar, per lb.		0	4 ¹ / ₂	0	4 ¹ / ₂
Singapore		0	3 ¹ / ₄	0	3 ¹ / ₄
White Tellicherry ..		0	0	0	10
Cayenne.....		1	4	2	0
MACE, 1st quality ..		1	11	0	11
2nd and inferior ..		1	0	0	11
NUTMEGS, 78 to 60 to lb.		3	8	3	8
90 to 80 „		2	11	3	0
132 to 95 „		1	10	2	2
PIMENTA.....		0	4	0	3 ⁵ / ₈
VARIOUS PRODUCTS.					
COCHINEAL—					
Honduras, black ..per lb.		2	2	2	5
„ silver ..		2	1	2	4
„ pasty ..		1	11	2	3
Mexican, black.....		2	1	2	2
„ silver.....		1	11	2	1 ¹ / ₂
Teneriffe, black ..		2	2	2	6
„ silver ..		2	0	2	4
SOAP, Castile.....per cwt.		26	0	33	0
SOY, China....., gall.		2	7	0	0
SPONGE, Turk. fin. pkd pr lb.		0	0	0	0
Fair to good „		0	0	0	0
Ordinary ..		0	0	0	0
Bahama.....		0	0	0	0
TERRA JAPONICA—					
Gambier.....per cwt.		16	6	20	0
Free cubes.....		25	0	28	0
Cutch.....		23	0	24	0
WOOD, DYE, Bar ..per ton		£3	0	£3	0
Brazil.....		14	0	15	0
Cam.....		22	0	18	0
Fustie, Cuba.....		0	0	8	0
Jamaica.....		5	0	5	7
LOGWOOD, Campenachy, „		8	5	9	0
Honduras.....		6	10	6	10
St. Domingo.....		4	7	5	15
Jamaica.....		5	2	5	10
LIMA, first pille.....		9	5	9	0
RED SANDERS.....		6	0	5	17



CORRESPONDENTS should be careful to send us their names and addresses, not necessarily for publication, but to authenticate their queries. We bind ourselves to do our best to answer all who conform to this rule, but anonymous questions will be answered or not as we find it convenient. We would also call attention to the heading "Notes and Queries," and would suggest that our readers should send us some Notes, and not Queries only. We frequently publish formulae, and think that it would be very valuable to the trade generally if those who try them would report their experience.

TUMBLERS BREAKING WITHOUT CAUSE.—During March and April we received letters from various correspondents, stating that they had known tumblers break without any apparent cause. We hoped that more cases would have been sent us, but finding that the supply seems to have ceased we now offer an explanation. W. C. D. said his glass broke half-an-hour after he had mixed in it some sulphur, bicarbonate of soda, sugar, and water. In J. H.'s case the glass cracked while a seidlitz powder was being mixed in it, and Hyde Park's tumbler broke about three hours after a mixture somewhat resembling Mist. sp. vin. gall had been made in it. It at once appears that the only thing common to these three cases is the mixing or stirring. In all probability, a grain of sand or of some hard material getting between the stirrer and the glass of the tumbler scratched the surface of the latter. It is well known that barometer tubes may be completely powdered by dragging an iron wire through them, or by pushing wool through them with a cane. The wire and the siliceous surface of the cane are sufficient to produce minute scratches on the surface. The fracture does not generally take place till several hours after the scratches were made, and it is generally explained by the hypothesis that owing to annealing not quite perfectly accomplished, the molecules of the glass are in a state of more or less severe tension, not powerful enough to injure the glass as long as the surface is continuous. As soon as this is scratched the tension of the molecules tends to make the scratches longer and deeper until they end in a complete solution of the continuity. Such probably is the cause of the mysterious breakages.

Fiel Pero Desdichado.—St. Bartholomew's, St. Thomas's, and Guy's are the three richest hospitals in London, but we are not prepared to say that a student has better chances of prizes, &c., in these than in others. Our September number always contains a large mass of information in reference to the various medical schools, and you might get prospectuses, giving full details, from the secretaries of any of these institutions.

S. X. N. (Gunnerybury).—Your great modesty or forgetfulness in sending us an incomplete address and only initials for a name has effectually debared us the pleasure of sending you the reprint you ask for. Surely your seniors' indifference would not prevent your receiving the private letter which we should have been very glad to send.

Platinum.—The following works are all recent, and may perhaps suit you:—W. Bartlett Dalby's "Lectures on Diseases and Injuries to the Ear," G. F. Fields's "Aural Surgery," James Keene's "Manual of Aural Surgery," and Soelberg Wells's "Treatise on Diseases of the Eye." See also our list of new books for this month. We should strongly advise you to do nothing more than read about these affections. We do not think either of the above are cheap, and they certainly do not treat of such things as weakness of eyes, deafness, &c. The causes which produce these symptoms are extremely various and are often hard to find, and interference with them is always dangerous.

Pyrotechnist (We adopt your own orthography), Belfast.—You ask for the formula for nitro-glycerine as coldly as if you were asking about a tooth-powder. We decline the responsibility of giving it to you, for the following reasons:—First, you do not conform to our rule that you should supply us with your proper name; secondly, you are evidently quite unacquainted with the product, as you confound it with Nobel's blasting powder; and thirdly, both these circumstances, and the way you spell your *nom-de-plume*, combine to indicate the extreme desirability of checking your otherwise laudable desire to attain practical acquaintance with the chemistry of explosives. We may add that nitro-glycerine is known as Nobel's Blasting Oil. Nobel's Blasting Powder is a mixture of 20 parts of nitro-glycerine with 70 parts of barium nitrate and 10 parts of charcoal.

Magnes Sulph.—Will some Leamington chemist give me the formula of "the broom," a purgative draught said to be much used there?

D. H. G. asks:—Can any of your correspondents tell me of a good work on corn cutting? (See our New Book List in this issue).

Jones.—Messrs. Ordish & Co., Hatton Garden, make a marking ink which they call "the raven black." Whether that title is or is not registered as a trade-mark, they could probably prevent any imitation of it by the Merchandise Marks Act, and at any rate they could oppose its registration in favour of any other maker.

H. W.—Soluble essences of ginger are advertised in our pages by Mr. Hay, of Hull, and by Messrs. Wilson, of Highgate. We have not observed any formula for their preparation. Of course the principle is the removal of the resin. 2. You must apply for sample for analysis within the dates named in our "Corner for Students."

POISONOUS VIOLET POWDER.—"Chemicus" says he puts up violet powder in 1d. packets. The starch he uses is so cheap that he feels sure it is adulterated, and he learns that the adulterant is terra alba or gypsum. He adds to it a little French chalk. He has been told by medical men that even if it did contain gypsum, the powder would not be injurious. He asks whether we think it is, and if the Adulteration Act affects it. The Sale of Food and Drugs Act (there is no Adulteration Act now) will not touch violet powder—firstly, as there is no published standard for it; and secondly, because it is neither a food nor a drug. Whether the violet powder will or will not be injurious depends on the quantity of terra alba it contains. The *British Medical Journal* of May 25 notices a case under the care of Mr. G. H. East, of Goolie, in which a rash, looking like roseola, was caused on the body of an infant by the use of violet powder, which, according to Dr. Parsons, the medical officer of health, consisted almost entirely of gypsum, probably scented with a littleorris root. When

fullers' earth was substituted for the violet powder, the rash disappeared in two days. Dr. Parsons strongly condemns this adulteration, "the only advantage lying in the deodorising qualities of sulphate of lime." This opinion, it will be seen, is double-edged and must be taken for what it is worth. We may infer from it that a small quantity of sulphate of lime would improve violet powder, and that a larger quantity would be injurious.

SCARLET INK.—"Chemicus" will find the best formula yet published on page 452 of our issue for November, 1877.

Dr. Alex. M. Williams (Washington, U.S.A.)—Wine Testing.—J. J. Griffin's "Chemical Testing of Wines and Spirits," published by Griffin & Sons, London, crown 8vo., 5s., is the standard work on this subject in England. You will probably find it meet all your wants.

A Country Student.—If you have been reading Lindley's "School Botany" without specimens you cannot be surprised that you find it dry. Get Oliver's "Elementary Lessons in Botany" (4s. 6d., Macmillan), or Holmes' "Botanical Notebook" (about 1s., Thomas Christy & Co., 155 Fenchurch Street) and carefully follow out the directions, being sure to get the plants and dissect them as you go along. You will find the work made very clear and easy both books. During this summer you had better give most of your time to botany. When the evenings get dark take up your chemistry again, and experiment, experiment, experiment. For materia medica get half a gross willow boxes, put in each a small specimen of a drug, and label the bottom of the box with the botanical name, locality, part used, dose and preparations of the drug. All this you can get from the pharmacopœia. Go over your cabinet continually until you can recognise every drug and give all particulars about it without hesitation. While dusting notice carefully colour, consistence, and smell of all the powders and tinctures, till you can recognise them without fail. When you feel safe so far, then apply to Mr. Wills for his minor course of lectures, and devote your self thoroughly to them. If you do this honestly and fairly, you may go up to the examination with a stout heart.

Rez., Redruth.—Why does nitrate of silver marking-ink occasionally b holes in the articles marked? A year or so ago this was made the subject of a paper in the *Pharmaceutical Journal*, by Mr. O. Corder, of Nor. He proved clearly that the damage was caused by nitrate of potash, or some other nitrate in the ink itself. Marking-ink is generally made by precipitating a solution of nitrate of silver with bitartrate of potash, or by mixing some alkaline compound with the nitrate. All ink made in this way contain a nitrate, and every one knows what is the effect of heating a of that acid with organic matter. The latter is sure to be carbonised, destroyed, and when a marked handkerchief is ironed to develop the color the marked parts are so weakened that they either break away at once wear out by use. The remedy is apparent. Make your marking-ink some process which will allow you to remove every trace of nitrate. involves a good deal of trouble, and is expensive when practised on a scale, but it is the only way in which we can prevent our customers' upraising us with their damaged goods.

J. H. D.—Messrs. W. J. Bush & Co., of Artillery Lane, make a preparation, of which we have forgotten the name, for producing a froth in lemonade, &c. We presume it is prepared from white of egg.

J. T. S. Radcliffe.—The number of chemists and druggists and pharmaceutical chemists on the Register is 11,013 and 2,307 respectively, making a total of 13,320. This number, of course, includes many assistants. The number of chemists in business in Great Britain is not accurately known but may be estimated at about 8,000 or 9,000. We have applied to the Inland Revenue Office for the information you desire, but hitherto without result.

M. M. (who does not give his name) asks for a formula for an inseparable lime-juice and glycerine. Two distinct preparations are under this name. One really contains lime-juice and glycerine, but is sticky and glues the user's hair into rats' tails. This is sold by conscientious persons, who do not clearly understand the chemistry of oils. The other is a formula which has been published several times:—

Lime-juice and glycerine (genuine)—

	Fluid ozs.
Lime-juice	10
Rosewater	5
Glycerine	2
S. V. R.	2

Perfume to taste.

An intermediate preparation, containing lime-juice and glycerine, and with fats, is made as follows:—

Cerae Alb.	3ij.
Cebacei ana...	3ij.
Ol. Amygd. ..	3viij.
Succ. limettae ..	3vi.
Glycerin. boracis ..	3ij.
Ess. limon. ..	3ss.
Ess. bergamot ..	3ij.

Melt the wax and spermaceti, add the oil and perfume, then shake till the lime-juice and glycerine previously warmed. This is said to stimulate consensations and the user's hair.

The preparation most usually sold is made by mixing lime-water with various oils. The result is a solution or emulsion of lime soap and water in oil. Nearly all oils are compounds of glycerine with fatty acids, and when the lime soap is formed in the mixture a certain amount of glycerine is set free. The word glycerine, therefore, may be rightly included in the title. Glycerine is sometimes added to the preparation, but does not improve it.

The best form we have tried is as follows:—

Almond oil and olive oil	each 12 ozs.
Lime-water	10 ozs.
Aqua calcis sacch.	2 ozs.
Ess. lemons and ol. jasmin	each 2 drachms.

Mix the lime-water and aqua calcis sacch. in a Winchester quart, add the oils a little at the time, shaking after each addition until the oil is emulsified, and lastly add the perfume. If this is thoroughly well shaken, no water will ever separate from it, although on standing it will divide into a layer of clear oil, and a lower one of white opaque emulsion. On shaking it will mix again very readily.

It has been stated that lin. ammon. is best made with green and slightly rancid olive oil, and it is quite probable that if this be used for lime-juice and glycerine, a whiter mixture would result. Please report your experience.

